This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

193
S373
Vh

LELAND·STANFORD·JVNIOR·VNIVERSITY

ON

LD ROOT OF THE

FFICIENT REASON

D

IN NATURE.

S BY

PENHAUER.

L HILLEBRAND

ON.

SO

LONDON: GEORGE BELL AND SONS
PORTUGAL ST. LINCOLN'S INN, W.C.
CAMBRIDGE: DEIGHTON, BELL & CO.
NEW YORK: THE MACMILLAN CO.
BOMBAY: A. H. WHEELER & CO.

ON
THE FOURFOLD ROOT OF THE PRINCIPLE OF SUFFICIENT REASON
AND
ON THE WILL IN NATURE.

TWO ESSAYS BY

ARTHUR SCHOPENHAUER.

TRANSLATED BY MME. KARL HILLEBRAND.

REVISED EDITION.

LONDON
GEORGE BELL AND SONS
1907

109121

CHISWICK PRESS: CHARLES WHITTINGHAM AND CO.
TOOKS COURT, CHANCERY LANE, LONDON.

TRANSLATOR'S PREFACE.

IN venturing to lay the present translation[1] before the public, I am aware of the great difficulties of my task, and indeed can hardly hope to do justice to the Author. In fact, had it not been for the considerations I am about to state, I might probably never have published what had originally been undertaken in order to acquire a clearer comprehension of these essays, rather than with a view to publicity.

The two treatises which form the contents of the present volume have so much importance for a profound and correct knowledge of Schopenhauer's philosophy, that it may even be doubted whether the translation of his chief work, "Die Welt als Wille und Vorstellung," can contribute much towards the appreciation of his system without the help at least of the "Vierfache Wurzel des Satzes vom zureichenden Grunde." Schopenhauer himself repeatedly and urgently insists upon a previous thorough knowledge of Kant's philosophy, as the basis, and of his own "Fourfold Root," as the key, to his own system, asserting that knowledge to be the indispensable condition for a right comprehension of his meaning. So far as I am aware, neither the "Fourfold Root" nor the "Will in Nature" have as yet found a translator; therefore, considering the dawning interest which has begun to make itself felt for Schopenhauer's philosophy in England and in America, and the fact that no more competent scholar has come forward to do the work, it may not seem presumptuous to suppose that this version may be acceptable to those who wish to acquire a more than superficial knowledge of this remarkable thinker, yet whose acquaintance with German does not permit them to read his works in the original.

---

[1] From the fourth edition by Julius Frauenstädt. "Fourfold Root," Leipzig, 1875; "Will in Nature," Leipzig, 1878.

Now although some portions of both the Essays published in the present volume have of course become antiquated, owing to the subsequent development of the empirical sciences, while others—such as, for instance, Schopenhauer's denunciation of plagiarism in the cases of Brandis and Rosas in the beginning of Physiology and Pathology [1]—can have no interest for the reader of the present day, I have nevertheless given them just as he left them and refrained from all suppression or alteration. And if, on the whole, the "Will in Nature" may be less indispensable for a right understanding of our philosopher's views than the "Fourfold Root," being merely a record of the confirmations which had been contributed during his lifetime by the various branches of Natural Science to his doctrine, that *the thing in itself is the will*, the Second Essay has nevertheless in its own way quite as much importance as the First, and is, in a sense, its complement. For they both throw light on Schopenhauer's view of the Universe in its double aspect as Will and as Representation, each being as it were *a résumé* of the exposition of one of those aspects. My plea for uniting them in one volume, in spite of the difference of their contents and the wide lapse of time (seventeen years) which lies between them, must be, that they complete each other, and that their great weight and intrinsic value seem to point them out as peculiarly fitted to be introduced to the English thinker.

In endeavouring to convey the Author's thoughts as he expresses them, I have necessarily encountered many and great difficulties. His meaning, though always clearly expressed, is not always easy to seize, even for his countrymen; as a foreigner, therefore, I may often have failed to grasp, let alone adequately to render, that meaning. In this case besides, the responsibility for any want of perspicuity cannot be shifted by the translator on to the Author; since the consummate perfection of Schopenhauer's prose is universally recognised, even by those who reject, or at least who do not share, his views. An eminent German writer of our time has not hesitated to rank him immediately after Lessing and Göthe as the third greatest German prose-writer, and only quite recently a German professor, in a speech delivered with the intent of demolishing Schopenhauer's philosophy, was reluctantly obliged to admit that his works would remain on account of their literary value. Göthe himself expressed admiration for the clearness of exposition in Schopenhauer's chief work and for the beauty of his style.

---

[1] See "Will in Nature," pp. 9-18 of the original; pp. 224-234 of the present translation.

The chief obstacle I have encountered in translating these Essays, did not therefore consist in the obscurity of the Author's style, nor even in the difficulty of finding appropriate terms wherewith to convey his meaning; although at times certainly the want of complete precision in our philosophical terminology made itself keenly felt and the selection was often far from easy: it lay rather in the great difference in the way of thinking and of expressing their thoughts which lies between the two nations. The regions of German and English thought are indeed separated by a gulf, which at first seems impassable, yet which must be bridged over by some means or other, if a right comprehension is to be achieved. The German writer loves to develop synthetically a single thought in a long period consisting of various members; he proceeds steadily to unravel the seemingly tangled skein, while he keeps the reader ever on the alert, making him assist actively in the process and never letting him lose sight of the main thread. The English author, on the contrary, anxious before all things to avoid confusion and misunderstanding, and ready for this end not only to sacrifice harmony of proportion in construction, but to submit to the necessity of occasional artificial joining, usually adopts the analytical method. He prefers to divide the thread of his discourse into several smaller skeins, easier certainly to handle and thus better suiting the convenience of the English thinker, to whom long periods are trying and bewildering, and who is not always willing to wait half a page or more for the point of a sentence or the gist of a thought. Wherever it could be done without interfering seriously with the spirit of the original, I have broken up the longer periods in these essays into smaller sentences, in order to facilitate their comprehension. At times however Schopenhauer recapitulates a whole side of his view of the Universe in a single period of what seems intolerable length to the English reader: as, for instance, the *résumé* contained in the Introduction to his "Will in Nature,"[1] which could not be divided without damage to his meaning. Here therefore it did not seem advisable to sacrifice the unity and harmony of his design and to disturb both his form and his meaning, in order to minister to the reader's dislike for mental exertion; in keeping the period intact I have however endeavoured to make it as easy to comprehend as possible by the way in which the single parts are presented to the eye.

As regards the terms chosen to convey the German meaning, I can hardly hope to have succeeded in every case in adequately rendering it, still less can I expect to have satisfied my English readers. Several words of frequent occurrence and of considerable importance for the right understanding of the original, have been used at different times by different English philosophers in senses so various, that, until our philosophical terminology has by universal consent attained far greater precision than at present, it must always be difficult for the writer or translator to convey to the reader's mind precisely the same thought that was in his own. To prevent unnecessary confusion however, by leaving too much to chance, I will here briefly state those terms which give most latitude for misapprehension, explaining the sense in which I employ them and also the special meaning attached to some of them by Schopenhauer, who often differs in this from other writers. They are as follows.

---

[1] Pp. 2 and 3 of the original, and pp. 216 to 218 of the present translation.

(*a.*) *Anschauung* (*anschauen*, literally 'to behold') I have rendered differently, according to its double meaning in German. When used to designate the mental act by which an object is perceived, as the cause of a sensation received, it is rendered by *perception*. When used to lay stress upon *immediate*, as opposed to *abstract* representation, it is rendered by *intuition*. This last occurs however more often in the adjective form.

(*b.*) *Vorstellung* (*vorstellen*, literally 'to place before') I render by *representation* in spite of its foreign, unwelcome sound to the English ear, as being the term which nearest approaches the German meaning. The faculty of representation is defined by Schopenhauer himself as "an exceedingly complicated physiological process in the brain of an animal, the result of which is the consciousness of a *picture* there."

(*c.*) *Auffassung* (*auffassen*, literally 'to catch up') has so many shades of meaning in German that it has to be translated in many different ways according to the relation in which it stands in the context. It signifies *apprehension*, *comprehension*, *perception*, *viewing* and *grasping*.

(*d.*) *Wahrnehmung* (*wahrnehmen*, from *wahr*, true, and *nehmen*, to take), is translated by *apprehension* or *perception*, according to the degree of consciousness which accompanies it.

But the two words which have proved most difficult to translate, have been *Vernehmen* and *Willkühr*.

(*e.*) *Vernehmen* means, to distinguish by the sense of hearing. This word conveys a shade of thought which it is almost impossible to render in English, because we have no word by which to distinguish, from mere sensuous hearing, a sort of hearing which implies more than hearing and less than comprehension. The French *entendre* comes nearer to it than our *hearing*, but implies more comprehension than *vernehmen*.

(*f.*) As to *Willkühr* (*arbitrium*, literally '*will-choice*'), after a great deal of consideration I have chosen (*relative*) *free-will* as the nearest approach to the German sense, or at any rate, to that in which Schopenhauer uses it. *Willkühr* means in fact what is commonly understood as free-will; *i.e.* will with power of choice, will determined by motives and unimpeded by outward obstacles: *arbitrium* as opposed to *voluntas:* conscious will as opposed to blind impulse. This relative free-will however is quite distinct from *absolute free-will* (*liberum arbitrium indifferentiæ*) in a metaphysical sense, *i.e.* will in its self-dependency. When its arbitrary character is specially emphasized, we call *Willkühr*, *caprice*, but this is not the usual meaning given to it by Schopenhauer.

Besides the meaning of these German words, I have still to define the sense in which I have used the term *idea* in this translation; for this word has greatly changed its meaning at different times and with different authors, and is even now apt to confuse and mislead. Schopenhauer has himself contributed in one way to render its signification less clear; since, in spite of his declaration in the "Fourfold Root"[1] to the effect, that he never uses the word *idea* in any other than its original (Platonic) sense, he has himself employed it to translate *Vorstellung*, in a specimen he gives of a rendering of a passage in Kant's "Prolegomena" in a letter addressed to Haywood, published in Gwinner's "Biography of Schopenhauer." This he probably did because some eminent English and French philosophers had taken the word in this sense, thinking perhaps that Kant's meaning would thus be more readily understood. As however he uses the word '*idea*' everywhere else exclusively in its original (Platonic) sense, I have preferred to avoid needless confusion by adhering to his own declaration and definition. Besides, many English writers of note have protested against any other sense being given to it, and modern German philosophers have more and more returned to the original meaning of the term.

---

[1] See p. 113, § 34 of the original, and p. 133 of the present translation.

Some readers may take exception at such expressions as *à priority, motivation, aseity;* for they are not, strictly speaking, English words. These terms however belong to Schopenhauer's own characteristic terminology, and have a distinct and clearly defined meaning; therefore they had to be retained in all cases in which they could not be evaded, in order not to interfere with the Author's intention: a necessity which the scholar will not fail to recognise, especially when I plead in my defence that fidelity and accuracy have been my sole aim in this work.

If moreover Carlyle's words, "He who imports into his own country any true delineation, any rationally spoken word on any subject, has done well," are true, I may also be absolved from censure, if I lay before the public this version of some important utterances of a great thinker, in the hope that it may be an assistance in, and an incitement to, a deeper study of all Schopenhauer's works.

THE TRANSLATOR.

May, 1888.

CONTENTS.

ON THE FOURFOLD ROOT OF THE PRINCIPLE OF SUFFICIENT REASON.

CHAP. PAGE

Translator's Preface v

Author's Preface to the Second Edition xvii

Editor's Preface to the Third Edition xx

Editor's Preface to the Fourth Edition . . . xxviii

I. Introduction 1

II. General Survey of the most important views hitherto held concerning the Principle of Sufficient Reason . . . 6

III. Insufficiency of the Old and outlines of a New Demonstration 28

IV. On the First Class of Objects for the Subject, and that form of the Principle of Sufficient Reason which predominates in it 31

V. On the Second Class of Objects for the Subject and that form of the Principle of Sufficient Reason which predominates in it 114

VI. On the Third Class of Objects for the Subject and that form of the Principle of Sufficient Reason which predominates in it 153

VII. On the Fourth Class of Objects for the Subject, and that form of the Principle of Sufficient Reason which predominates in it 165

VIII. General observations and results 177

ON THE WILL IN NATURE.

PAGE
Preface to the Second Edition 193
Editor's Preface to the Third Edition 213
Editor's Preface to the Fourth Edition 214
Introduction 215
Physiology and Pathology 224
Comparative Anatomy 252
Physiology of Plants 281
Physical Astronomy 305
Linguistic 322
Animal Magnetism and Magic 326
Sinology 359
Reference to Ethics 372
Conclusion 378

ON THE FOURFOLD ROOT

OF THE

PRINCIPLE OF SUFFICIENT REASON.

A PHILOSOPHICAL TREATISE.

Ναὶ μὰ τὸν ἀμετέρᾳ ψυχᾷ παραδόντα τετρακτύν,
Παγὰν ἀενάου φύσεως ῥιζώματ' ἔχουσαν.

THE AUTHOR'S PREFACE TO THE SECOND EDITION.

THIS treatise on Elementary Philosophy, which first appeared in the year 1813, when it procured for me the degree of doctor, afterwards became the substructure for the whole of my system. It cannot, therefore, be allowed to remain out of print, as has been the case, without my knowledge, for the last four years.

On the other hand, to send a juvenile work like this once more into the world with all its faults and blemishes, seemed to me unjustifiable. For I am aware that the time cannot be very far off when all correction will be impossible; but with that time the period of my real influence will commence, and this period, I trust, will be a long one, for I firmly rely upon Seneca's promise: "*Etiamsi omnibus tecum viventibus silentium livor indixerit; venient qui sine offensa, sine gratia judicent.*" [1] I have done what I could, therefore, to improve this work of my youth, and, considering the brevity and uncertainty of life, I must even regard it as an especially fortunate circumstance, to have been thus permitted to correct in my sixtieth year what I had written in my twenty-sixth.

Nevertheless, while doing this, I meant to deal leniently with my younger self, and to let him discourse, nay, even speak his mind freely, wherever it was possible. But wherever he had advanced what was incorrect or superfluous, or had even left out the best part, I have been obliged to interrupt the thread of his discourse. And this has happened often enough; so often, indeed, that some of my readers may perhaps think they hear an old man reading a young man's book aloud, while he frequently lets it drop, in order to indulge in digressions of his own on the same subject.

---

[1] Seneca, Ep. 79.

It is easy to see that a work thus corrected after so long an interval, could never acquire the unity and rounded completeness which only belong to such as are written in one breath. So great a difference will be found even in style and expression, that no reader of any tact can ever be in doubt whether it be the older or younger man who is speaking. For the contrast is indeed striking between the mild, unassuming tone in which the youth—who is still simple enough to believe quite seriously that for all whose pursuit is philosophy, truth, and truth alone, can have importance, and therefore that whoever promotes truth is sure of a welcome from them—propounds his arguments with confidence, and the firm, but also at times somewhat harsh voice of the old man, who in course of time has necessarily discovered the true character and real aims of the noble company of mercenary time-servers into which he has fallen. Nay, the just reader will hardly find fault with him should he occasionally give free vent to his indignation; since we see what comes of it when people who profess to have truth for their sole aim, are always occupied in studying the purposes of their powerful superiors, and when the *e quovis ligno fit Mercurius* is extended even to the greatest philosophers, and a clumsy *charlatan*, like Hegel, is calmly classed among them? Verily German Philosophy stands before us loaded with contempt, the laughing-stock of other nations, expelled from all honest science—like the prostitute who sells herself for sordid hire to-day to one, to-morrow to another; and the brains of the present generation of *savants* are disorganised by Hegelian nonsense: incapable of reflection, coarse and bewildered, they fall a prey to the low Materialism which has crept out of the basilisk's egg. Good speed to them. I return to my subject.

My readers will thus have to get over the difference of tone in this treatise; for I could not do here what I had done in my chief work, that is, give the later additions I had made in a separate appendix. Besides, it is of no consequence that people should know what I wrote in my twenty-sixth and what in my sixtieth year; the only matter of real importance is, that those who wish to find their way through the fundamental principles of all philosophizing, to gain a firm footing and a clear insight, should in these few sheets receive a little volume by which they may learn something substantial, solid, and true: and this, I hope, will be the case. From the expansion now given to some portions, it has even grown into a compendious theory of the entire faculty of knowing, and this theory, by limiting itself strictly to the research of the Principle of Sufficient Reason, shows the matter from a new and peculiar side; but then it finds its completion in the First Book of "The World as Will and Representation," together with those chapters of the Second Volume which refer to it, and also in my Critique of Kantian Philosophy.

ARTHUR SCHOPENHAUER

FRANKFURT AM MAIN,
September, 1847.

EDITOR'S PREFACE TO THE THIRD EDITION.

IN the present volume I lay before the public the Third Edition of the "Fourfold Root," including the emendations and additions left by Schopenhauer in his own interleaved copy. I have already had occasion elsewhere to relate that he left copies of all his works thus interleaved, and that he was wont to jot down on these fly-leaves any corrections and additions he might intend inserting in future editions.

Schopenhauer himself prepared for the press all that has been added in the present edition, for he has indicated, by signs in the original context corresponding to other similar signs in the MS. passages, the places where he wished his additions to be inserted. All that was left for me to do, was to give in extended form a few citations he had purposed adding.

No essential corrections and additions, such as might modify the fundamental thoughts of the work, will be found in this new edition, which simply contains corrections, amplifications, and corroborations, many of them interesting and important. Let me take only a single instance: § 21, on the "Intellectual Nature of Empirical Perception." As Schopenhauer attached great importance to his proof of the *intellectual nature* of perception, nay, believed he had made a new discovery by it, he also worked out with special predilection all that tended to support, confirm, and strengthen it. Thus we find him in this § 21 quoting an interesting fact he had himself observed in 1815; then the instances of Caspar Hauser and others (taken from Franz's book, "The Eye," &c. &c.); and again the case of Joseph Kleinhaus, the blind sculptor; and finally, the physiological confirmations he has found in Flourens' "De la vie et de l'intelligence des Animaux." An observation, too, concerning the value of Arithmetic for the comprehension of physical processes, which is inserted into this same paragraph, will be found very remarkable, and may be particularly recommended to those who are inclined to set too high a value on calculation.

Many interesting and important additions will be found in the other paragraphs also.

One thing I could have wished to see left out of this Third Edition: his effusions against the "professors of philosophy." In a conversation with Schopenhauer in the year 1847, when he told me how he intended to "chastise the professors of philosophy,"[1] I expressed my dissent on this point; for even in the Second Edition these passages had interrupted the measured progress of objective inquiry. At that time, however, he was not to be persuaded to strike them out; so they were left to be again included in this Third Edition, where the reader will accordingly once more find them, although times have changed since then.

Upon another point, more nearly touching the real issue, I had a controversy with Schopenhauer in the year 1852. In arguing against Fichte's derivation of the *Non-Ego* from the *Ego* in his chief work,[2] he had said:—

---

[1] See "Arthur Schopenhauer. Von ihm; über ihn. Ein Wort der Vertheidigung," von Ernst Otto Lindner, and "Memorabilien, Briefe und Nachlassstücke," von Julius Frauenstädt (Berlin, 1863), pp. 163-165.

[2] Schopenhauer, "Die Welt als Wille und Vorstellung," second edition, i., 37 (third edition, i., 39).

"Just as if Kant had never existed, the Principle of Sufficient Reason still remains with Fichte what it was with all the Schoolmen, an *æterna veritas:* that is to say, just as the Gods of the ancients were still ruled over by eternal Destiny, so was the God of the Schoolmen still ruled over by these *æterna veritates*, *i.e.*, by the metaphysical, mathematical, and metalogical truths, and even, according to some, by the validity of the moral law. These *veritates* alone were unconditioned by anything, and God, as well as the world, existed through their necessity. Thus with Fichte the *Ego*, according to the Principle of Sufficient Reason, is the reason of the world or of the *Non-Ego*, of the Object, which is the product or result of the *Ego* itself. He took good care, therefore, neither to examine nor to check the Principle of Sufficient Reason any farther. But if I had to indicate the particular form of this principle by which Fichte was guided in making the *Ego* spin the *Non-Ego* out of itself, as the spider its web, I should point to the Principle of the Sufficient Reason of Being in Space; for nothing but a reference to this principle gives any sort of sense or meaning to his laboured deductions of the way in which the *Ego* produces and manufactures the *Non-Ego* out of itself, which form the contents of the most senseless and—simply on this account—most tiresome book ever written. The only interest this Fichteian philosophy has for us at all—otherwise it would not be worth mentioning—lies in its being the tardy appearance of the real antithesis to ancient Materialism, which was the most consistent starting from the Object, just as Fichte's philosophy was the most consistent starting from the Subject. As Materialism overlooked the fact, that with the simplest Object it forthwith posited the Subject also; so Fichte not only overlooked the fact, that with the Subject (whatever name he might choose to give it) he had already posited the Object also, because no Subject can be thought without it; he likewise overlooked the fact, that all derivation *à priori*, nay, all demonstration whatsoever, rests upon a necessity, and that all necessity itself rests entirely and exclusively on the Principle of Sufficient Reason, because to be necessary, and to result from a given reason, are convertible terms; that the Principle of Sufficient Reason is still nothing but the common form of the Object as such: therefore that it always presupposes the Object and does not, as valid before and independently of it, first introduce it, and cannot make the Object arise in conformity with its own legislation. Thus this starting from the Object and the above-mentioned starting from the Subject have in common, that both presuppose what they pretend to derive: *i.e.*, the necessary correlate of their starting-point."

This last assertion "that the Principle of Sufficient Reason *already presupposes the Object*, but does not, as valid before and independently of it, first introduce it, and cannot make the Object arise in conformity with its own legislation," seemed to me so far to clash with the proof given by Schopenhauer in § 21 of the "Fourfold Root," as, according to the latter, it is *the function of the Subject's understanding* which primarily creates the *objective* world out of the subjective feelings of the sensuous organs by the application of the Principle of Sufficient Reason; so that all that is Object, as such, after all comes into being only in conformity with the Principle of Sufficient Reason, consequently that this principle cannot, as Schopenhauer asserted in his polemic against Fichte, already presuppose the Object. In 1852, therefore, I wrote as follows to Schopenhauer:—

"In your arguments against Fichte, where you say that the Principle of Sufficient Reason already presupposes the Object, and cannot, as valid before and independently of it, first introduce it, the objection occurred to me anew, that in your "Fourfold Root" you had made the Object of perception first come into being through the application of the Principle of Sufficient Reason, and that you yourself, therefore, derive the Object from the Subject, as, for instance, p. 73 of the "Fourfold Root" (2nd edition). How then can you maintain against Fichte that the Object is always presupposed by the Subject? I know of no way of solving this difficulty but the following: The Subject only presupposes in the Object what belongs to the thing in itself, what is inscrutable; but it creates itself the *representation* of the Object, *i.e.* that by which the thing in itself becomes *phenomenon*. For instance, when I see a tree, my Subject assumes the thing in itself of that tree; whereas the *representation* of it conversely presupposes the operation of my Subject, the transition from the effect (in my eye) to its cause."

To this Schopenhauer replied as follows on the 12th of July, 1852:—

"Your answers (to the objection in question) are not the right ones. Here there cannot yet be a question of the thing in itself, and the distinction between representation and object is inadmissible: the world is representation. The matter stands rather as follows—Fichte's derivation of the *Non-Ego* from the *Ego*, is quite abstract:—A = A, *ergo*, I = I, and so forth. Taken in an abstract sense, the Object is at once posited with the Subject. For to be Subject means, to know; and to know means, to have representations. Object and representation are one and the same thing. In the "Fourfold Root," therefore, I have divided all objects or representations into four classes, within which the Principle of Sufficient Reason always reigns, though in each class under a different form; nevertheless, the Principle of Sufficient Reason always presupposes the class itself, and indeed, properly speaking, they coincide.[1] Now, in reality, the existence of the Subject of knowing is not an abstract existence. The Subject does not exist for itself and independently, as if it had dropped from the sky; it appears as the instrument of some individual phenomenon of the Will (animal, human being), whose purposes it is destined to serve, and which thereby now receives a consciousness, on the one hand, of itself, on the other hand, of everything else. The question next arises, as to how or out of what *elements* the representation of the outer world is brought about within this consciousness. This I have already answered in my "Theory of Colours" and also in my chief work,[1] but most thoroughly and exhaustively of all in the Second Edition of the "Fourfold Root," § 21, where it is shown, that all those elements are of *subjective* origin; wherefore attention is especially drawn to the great difference between all this and Fichte's humbug. For the whole of my exposition is but the full carrying out of Kant's Transcendental Idealism."[2]

---

[1] See "Die Welt a. W. u. V.," vol. ii. pp. 17-21, and vol. i. p. 39 of

I have thought it advisable to give this passage of his letter, as being relevant to the matter in question. As to the division in chapters and paragraphs, it is the same in this new edition as in the last. By comparing each single

---

the second edition. (The passages referred to by Schopenhauer in the second edition are in the third edition vol. ii. pp. 18-21, and vol. i. p. 40).

[1] Die Welt a. W. u. V., vol. i. p. 22 *et seqq.*, and vol. ii. chap. ii. of the second edition; vol. i. p. 22, § 6, and vol. ii. chap. ii. of the third edition.

[2] The passage I have quoted above from Schopenhauer's letter is also to be found among the letters published in my book, "Arthur Schopenhauer. Von ihm, über ihn, u. s. w.," p. 541 *et seqq.*, and it results from this, as well as from several other letters which likewise deal with important and knotty points in his philosophy, that this correspondence may perhaps not be quite so worthless and unimportant as many—among them Gwinner, in his pamphlet, "Schopenhauer und seine Freunde" (Leipzig, 1863)—represent it to be. This pamphlet of Gwinner's, by the way, has met with the treatment it deserves in the Preface to the collection, "Aus Arthur Schopenhauer's handschriftlichen Aphorismen und Nachlass. Abhandlungen, Anmerkungen, Fragmente." (Leipzig, 1864).

paragraph of the second with the same paragraph of the present edition, it will be easy to find out what has been newly added. In conclusion, however, I will still add a short list of the principal passages which are new.

LIST OF ADDITIONS TO THE THIRD EDITION.

§ 8, p. 13, the passages from "*Notandum*," &c., to "*Ex necessitate*," and p. 14, from "*Zunächst adoptirt*" down to the end of the page (English version, p. 14, "*Not.*," &c., to "*Ex nec.*"; p. 15, from "First he adopts" down to the end of the paragraph, p. 16, "*est* causa sui"), in confirmation of his assertion that Spinoza had interchanged and confounded the relation between reason of knowledge and consequent, with that between cause and effect.

§ 9, p. 17, from "*er proklamirt*" down to "*gewusst haben wird.*" (E. v., § 9, p. 19, from "He proclaims it" down to "by others before.")

§ 20, p. 42, in speaking of *reciprocity* (*Wechselwirkung*), from the words "*Ja, wo einem Schreiber*" down to "*ins Bodenlose gerathen sei.*" (E. v., § 20, p. 45, from "Nay, it is precisely" down to "his depth.")

§ 21, p. 61, the words at the bottom, "*und räumlich konstruirt*," down to p. 62, "*Data erhält*," together with the quotation concerning the blind sculptor, J. Kleinhaus. (E. v., § 21, p. 67, the words "and constructs in Space" down to "of the Understanding,") and the note.

§ 21, pp. 67-68, from "*Ein specieller und interessanter Beleg*" down to "*albernes Zeug dazu.*" (E. v., § 21, p. 73, "I will here add" down to p. 74, "followed by twaddle.")

§ 21, p. 73, *sq.*, the instances of Caspar Hauser, &c., from Franz, "The Eye," &c., and the physiological corroborations from Flourens, "*De la vie et de l'intelligence*," &c. (E. v., p. 80, and following.)

§ 21, p. 77, the parenthesis on the value of calculation. (E. v., p. 83, "All comprehension," &c.)

§ 21, p. 83, the words "*da ferner Substanz*" down to "*das Wirken* in concreto." (E. v., § 21, p. 90, "Substance and Matter" down to "*in concreto*.")

§ 29, p. 105, the words "*im Lateinischen*" down to "*erkannte*." (E. v., § 29, p. 116, from "In Latin" down to "*κατ' ἐζοχήν*.")

§ 34, p. 116, the words "*Ueberall ist*" down to "*Praxis und Theorie*." (E. v., § 34, p. 128, the words "Reasonable or Rational" down to "theory and practice.")

§ 34, p. 121, the verses from Göthe's "West-Östlicher Divan."

§ 34, p. 125, *Anmerkung*, the words "*Auch ist Brahma*" down to "*die erstere*," and p. 126, the quotation from I. J. Schmidt's "Forschungen." (E. v., § 34, p. 138, note, "Brahma is also" down to "first of these.")

§ 34, p. 127, the words from "*Aber der naive*" down to "*judaisirten gouverneurs*" (E. v., § 34, p. 150, sentence beginning "But the artless" down to "infancy," and the Greek quotation from Plutarch in the note.)

§ 34, p. 128, the words from "*Ganz übereinstimmend*" down to "*überflüssige sein soll*." (E. v., p. 151, from "J. F. Davis" down to "superfluous.")

§ 45, p. 147, the words "*Eben daher kommt es*" down to "*sich erhält*." (E. v., § 45, p. 163, "It is just for this reason too" down to "their possession.")

§ 45, p. 149, the words "*Man suche Das*," &c., down to "*gelesen haben*." (E. v., § 45, p. 164, from "We should" down to "read in books.")

§ 49, p. 154, the words "*Der bei den Philosophastern*," down to "*zu kontroliren sind*." (E. v., § 49, p. 169, from the words "The conception of our," &c., down to "by perception.")

§ 50, p. 156, the words "*Denn der Satz vom Grunde*" down to "*nur sich selbst nicht.*" (E. v., § 50, p. 172, from "For the Principle of Sufficient Reason," &c., down to "everything else.")

§ 52, p. 158, the words "*Der allgemeine Sinn des Satzes vom Grunde,*" down to "*der Kosmologische Beweis ist.*" (E. v., § 52, p. 173, from "The general meaning" down to "the Cosmological Proof.")

JULIUS FRAUENSTÄDT.

BERLIN, *August*, 1864.

EDITOR'S PREFACE TO THE FOURTH EDITION.

THE present Fourth Edition is of the same content as the Third; therefore it contains the same corrections and additions which I had already inserted in the Third Edition from Schopenhauer's own interleaved copy of this work.

JULIUS FRAUENSTÄDT.

BERLIN, *September*, 1877.

ON THE FOURFOLD ROOT
OF THE
PRINCIPLE OF SUFFICIENT REASON.

CHAPTER I.

INTRODUCTION.

§ 1. *The Method.*

THE divine Plato and the marvellous Kant unite their mighty voices in recommending a rule, to serve as the method of all philosophising as well as of all other science.[1] Two laws, they tell us: the law of *homogeneity* and the law of *specification*, should be equally observed, neither to the disadvantage of the other. The law of *homogeneity* directs us to collect things together into kinds, by observing their resemblances and correspondences, to collect kinds again into species, species into genera, and so on, till at last we come to the highest all-comprehensive conception. Now this law, being transcendental, *i.e.* essential to our Reason, takes for granted that Nature conforms with it: an assumption which is expressed by the ancient formula, *entia præter necessitatem non esse multi-*

---

[1] Platon, "Phileb." pp. 219-223. "Politic." 62, 63. "Phædr." 361-363, ed. Bip. Kant, "Kritik der reinen Vernunft. Anhang zur transcend. Dialektik." English Translation by F. Max Müller. "Appendix to the Transc. Dialectic." pp. 551, and *seqq.*

plicanda. As for the law of *specification,* Kant expresses it thus: *entium varietates non temere esse minuendas.* It requires namely, that we should clearly distinguish one from another the different genera collected under one comprehensive conception; likewise that we should not confound the higher and lower species comprised in each genus; that we should be careful not to overleap any, and never to classify inferior species, let alone individuals, immediately under the generic conception: each conception being susceptible of subdivision, and none even coming down to mere intuition. Kant teaches that both laws are transcendental, fundamental principles of our Reason, which postulate conformity of things with them *à priori;* and Plato, when he tells us that these rules were flung down from the seat of the gods with the Promethean fire, seems to express the same thought in his own way.

§ 2. *Application of the Method in the present case.*

In spite of the weight of such recommendations, I find that the second of these two laws has been far too rarely applied to a fundamental principle of all knowledge: *the Principle of Sufficient Reason.* For although this principle has been often and long ago stated in a general way, still sufficient distinction has not been made between its extremely different applications, in each of which it acquires a new meaning; its origin in various mental faculties thus becoming evident. If we compare Kant's philosophy with all preceding systems, we perceive that, precisely in the observation of our mental faculties, many persistent errors have been caused by applying the principle of homogeneity, while the opposite principle of specification was neglected; whereas the law of specification has led to the greatest and most important results. I therefore crave permission to quote a passage from Kant, in which the application of the law of specification to the sources of our knowledge is especially recommended; for it gives countenance to my present endeavour:—

"It is of the highest importance to *isolate* various sorts of knowledge, which in kind and origin are different from others, and to take great care lest they be mixed up with those others with which, for practical purposes, they are generally united. What is done by the chemist in the analysis of substances, and by the mathematician in pure mathematics, is far more incumbent on the philosopher, in order to enable him to define clearly the part which, in the promiscuous employment of the understanding, belongs to a special kind of knowledge, as well as its peculiar value and influence."[1]

§ 3. *Utility of this Inquiry.*

Should I succeed in showing that the principle which forms the subject of the present inquiry does not issue directly from *one* primitive notion of our intellect, but rather in the first instance from *various* ones, it will then follow, that neither can the necessity it brings with it, as a firmly established *à priori* principle, be *one* and the *same* in all cases, but must, on the contrary, be as manifold as the sources of the principle itself. Whoever therefore bases a conclusion upon this principle, incurs the obligation of clearly specifying on which of its grounds of necessity he founds his conclusion and of designating that ground by a special name, such as I am about to suggest. I hope that this may be a step towards promoting greater lucidity and precision in philosophising; for I hold the extreme clearness to be attained by an accurate definition of each single expression to be indispensable to us, as a defence both against error and against intentional deception, and also as a means of securing to ourselves the permanent, unalienable possession of each newly acquired notion within the sphere of philosophy beyond the fear of losing it again on account of any misunderstanding or double meaning which might hereafter be detected. The true philosopher will indeed always seek after light and perspicuity, and will endeavour to resemble a Swiss lake—which through its peacefulness is enabled to unite great depth with great clearness, the depth revealing itself precisely by the clearness—rather than a turbid, impetuous mountain torrent. "*La clarté est la bonne foi des philosophes,*" says Vauvenargues. Pseudo-philosophers, on the contrary, use speech, not indeed to conceal their thoughts, as M. de Talleyrand has it, but rather to conceal the absence of them, and are apt to make their readers responsible for the incomprehensibility of their systems, which really proceeds from their own confused thinking. This explains why in certain writers—Schelling, for instance—the tone of instruction so often passes into that of reproach, and frequently the reader is even taken to task beforehand for his assumed inability to understand.

---

[1] Kant, "Krit. d. r. V. Methodenlehre. Drittes Hauptstück," p. 842 of the 1st edition. Engl. Tr. by F. M. Müller. "Architectonic of Pure Reason," p. 723.

§ 4. *Importance of the Principle of Sufficient Reason.*

Its importance is indeed very great, since it may truly be called the basis of all science. For by *science* we understand a *system* of notions, *i.e.* a totality of connected, as opposed to a mere aggregate of disconnected, notions. But what is it that binds together the members of a system, if not the Principle of Sufficient Reason? That which distinguishes every science from a mere aggregate is precisely, that its notions are derived one from another as from their reason. So it was long ago observed by Plato: *καὶ γὰρ αἱ δόξαι αἱ ἀληθεῖς οὐ πολλοῦ ἄξιαί εἰσιν, ἕως ἄν τις αὐτὰς δήσῃ αἰτίας λογισμῷ* (*etiam opiniones veræ non multi pretii sunt, donec quis illas ratiocinatione a causis ducta liget*).[1] Nearly every science, moreover, contains notions of causes from which the effects may be deduced, and likewise other notions of the necessity of conclusions from reasons, as will be seen during the course of this inquiry. Aristotle has expressed this as follows: *πᾶσα ἐπιστήμη διανοητική, ἢ καὶ μετέχουσά τι διανοίας, περὶ αἰτίας καὶ ἀρχάς ἐστι* (*omnis intellectualis scientia, sive aliquo modo intellectu participans, circa causas et principia est*).[2] Now, as it is this very assumption *à priori* that all things must have their reason, which authorizes us everywhere to search for the *why*, we may safely call this *why* the mother of all science.

§ 5. *The Principle itself.*

We purpose showing further on that the Principle of Sufficient Reason is an expression common to several *à priori* notions. Meanwhile, it must be stated under some formula or other. I choose Wolf's as being the most comprehensive: *Nihil est sine ratione cur potius sit, quam non sit.* Nothing is without a reason for its being.[3]

---

[1] "Meno." p. 385, ed Bip. "Even true opinions are not of much value until somebody binds them down by proof of a cause." [Translator's addition.]

[2] Aristot. "Metaph." v. 1. "All knowledge which is intellectual or partakes somewhat of intellect, deals with causes and principles." [Tr.'s add.]

[3] Here the translator gives Schopenhauer's free version of Wolf's formula

CHAPTER II.

GENERAL SURVEY OF THE MOST IMPORTANT VIEWS HITHERTO HELD CONCERNING THE PRINCIPLE OF SUFFICIENT REASON.

§ 6. *First Statement of the Principle and Distinction between Two of its Meanings.*

A MORE or less accurately defined, abstract expression for so fundamental a principle of all knowledge must have been found at a very early age; it would, therefore, be difficult, and besides of no great interest, to determine where it first appeared. Neither Plato nor Aristotle have formally stated it as a leading fundamental principle, although both often speak of it as a self-evident truth. Thus, with a *naïveté* which savours of the state of innocence as opposed to that of the knowledge of good and of evil, when compared with the critical researches of our own times, Plato says: *ἀναγκαῖον, πάντα τὰ γιγνόμενα διά τινα αἰτίαν γίγνεσθαι· πῶς γὰρ ἂν χωρὶς τούτων γίγνοιτο;*[1] (*necesse est, quæcunque fiunt, per aliquam causam fieri: quomodo enim absque ea fierent?*) and then again: *πᾶν δὲ τὸ γιγνόμενον ὑπ' αἰτίου τινὸς ἐξ ἀνάγκης γίγνεσθαι· παντὶ γὰρ ἀδύνατον χωρὶς αἰτίου γένεσιν σχεῖν*[3] (*quidquid gignitur, ex aliqua causa*

---

[1] Platon, "Phileb." p. 240, ed Bip. "It is necessary that all which arises, should arise by some cause; for how could it arise otherwise?" [Tr.'s add.]

[2] *Ibid.* "Timæus," p. 302. "All that arises, arises necessarily from some cause; for it is impossible for anything to come into being without cause." [Tr.'s add.]

necessario gignitur: sine causa enim oriri quidquam, impossibile est). At the end of his book "De fato," Plutarch cites the following among the chief propositions of the Stoics: μάλιστα μὲν καὶ πρῶτον εἶναι δόξειε, τὸ μηδὲν ἀναιτίως γίγνεσθαι, ἀλλὰ κατὰ προηγουμένας αἰτίας[1] (*maxime id primum esse videbitur, nihil fieri sine causa, sed omnia causis antegressis*).

In the "Analyt. post." i. 2, Aristotle states the principle of sufficient reason to a certain degree when he says: ἐπίστασθαι δὲ οἰόμεθα ἕκαστον ἁπλῶς, ὅταν τήν τ' αἰτίαν οἰόμεθα γινώσκειν, δι' ἣν τὸ πρᾶγμα ἔστιν, ὅτι ἐκείνου αἰτία ἐστίν, καὶ μὴ ἐνδέχεσθαι τοῦτο ἄλλως εἶναι. (*Scire autem putamus unamquamque rem simpliciter, quum putamus causam cognoscere, propter quum res est, ejusque rei causam esse, nec posse eam aliter se habere.*)[2] In his "Metaphysics," moreover, he already divides causes, or rather principles, ἀρχαί, into different kinds,[3] of which he admits eight; but this division is neither profound nor precise enough. He is, nevertheless, quite right in saying, πασῶν μὲν οὖν κοινὸν τῶν ἀρχῶν, τὸ πρῶτον εἶναι, ὅθεν ἢ ἔστιν, ἢ γίνεται, ἢ γιγνώσκεται.[4] (*Omnibus igitur principiis commune est, esse primum, unde aut est, aut fit, aut cognoscitur.*) In the following chapter he distinguishes several kinds of causes, although somewhat superficially and confusedly. In the "Analyt. post." ii. 11, he states four kinds of causes in a more satisfactory manner:

---

[1] "This especially would seem to be the first principle: that nothing arises without cause, but [everything] according to preceding causes." [Tr.'s add.]

[2] "We think we understand a thing perfectly, whenever we think we know the cause by which the thing is, that it is really the cause of that thing, and that the thing cannot possibly be otherwise." [Tr.'s add.]

[3] Lib. iv. c. 1.

[4] "Now it is common to all principles, that they are the first thing through which [anything] is, or arises, or is understood." [Tr.'s add.]

αἰτίαι δὲ τέσσαρες· μία μὲν τό τι ἦν εἶναι· μία δὲ τὸ τινῶν ὄντων, ἀνάγκη τοῦτο εἶναι· ἑτέρα δὲ, ἥ τι πρῶτον ἐκίνησε· τετάρτη δὲ, τὸ τίνος ἕνεκα.[1] (*Causæ autem quatuor sunt: una quæ explicat quid res sit; altera, quam, si quædam sint, necesse est esse; tertia, quæ quid primum movit; quarta id, cujus gratia.*) Now this is the origin of the division of the *causæ* universally adopted by the Scholastic Philosophers, into *causæ materiales, formales, efficientes et finales,* as may be seen in "Suarii disputationes metaphysicæ"[2]—a real compendium of Scholasticism. Even Hobbes still quotes and explains this division.[3] It is also to be found in another passage of Aristotle, this time somewhat more clearly and fully developed ("Metaph." i. 3.) and it is again briefly noticed in the book "De somno et vigilia," c. 2. As for the vitally important distinction between *reason* and *cause,* however, Aristotle no doubt betrays something like a conception of it in the "Analyt. post." i. 13, where he shows at considerable length that knowing and proving *that* a thing exists is a very different thing from knowing and proving *why* it exists: what he represents as the latter, being knowledge of the *cause;* as the former, knowledge of the *reason.* If, however, he had quite clearly recognized the difference between them, he would never have lost sight of it, but would have adhered to it throughout his writings. Now this is not the case; for even when he endeavours to distinguish the various kinds of causes from one another, as in the passages I have mentioned above, the essential difference mooted in the chapter just alluded to, never seems to occur to him again. Besides he uses the term *αἴτιον* indiscriminately for every kind of cause, often indeed calling reasons of knowledge, and sometimes even the premisses of a conclusion, *αἰτίας*, as, for instance, in his "Metaph." iv. 18; "Rhet." ii. 2; "De plantis," i. p. 816 *(ed. Berol.)*, but more especially "Analyt. post." i. 2, where he calls the premisses to a conclusion simply *αἰτίαι τοῦ συμπεράσματος* (causes of the conclusion). Now, using the same word to express two closely connected conceptions, is a sure sign that their difference has not been recognised, or at any rate not been firmly grasped; for a mere accidental homonymous designation of two widely differing things is quite another matter. Nowhere, however, does this error appear more conspicuously than in his definition of the sophism *non causæ ut causa*, *παρὰ τὸ μὴ αἴτιον ὡς αἴτιον* (reasoning from what is not cause as if it were cause), in the book "De sophisticis elenchis," c. 5. By *αἴτιον* he here understands absolutely nothing but the argument, the premisses, consequently a reason of knowledge; for this sophism consists in correctly proving the impossibility of something, while the proof has no bearing whatever upon the proposition in dispute, which it is nevertheless supposed to refute. Here, therefore, there is no question at all of physical causes. Still the use of the word *αἴτιον* has had so much weight with modern logicians, that they hold to it exclusively in their accounts of the *fallacia extra dictionem*, and explain the *fallacia non causæ ut causa* as designating a physical cause, which is not the case. Reimarus, for instance, does so, and G. E. Schultze and Fries—all indeed of whom I have any knowledge. The first work in which I find a correct definition of this sophism, is Twesten's Logic. Moreover, in all other scientific works and controversies the charge of a *fallacia non causæ ut causa* usually denotes the interpolation of a wrong cause.

---

[1] "There are four causes: first, the essence of a thing itself; second, the *sine qua non* of a thing; third, what first put a thing in motion; fourth, to what purpose or end a thing is tending." [Tr.'s add.]

[2] "Suarii disputationes metaph." Disp. 12, sect. 2 et 3.

[3] Hobbes, "De corpore," P. ii. c. 10, § 7.

Sextus Empiricus presents another forcible instance of the way in which the Ancients were wont universally to confound the logical law of the reason of knowledge with the transcendental law of cause and effect in Nature, persistently mistaking one for the other. In the 9th Book "Adversus Mathematicos," that is, the Book "Adversus Physicos," § 204, he undertakes to prove the law of causality, and says: "He who asserts that there is no cause (*αἰτία*), either has no cause (*αἰτία*) for his assertion, or has one. In the former case there is not more truth in his assertion than in its contradiction; in the latter, his assertion itself proves the existence of a cause."

By this we see that the Ancients had not yet arrived at a clear distinction between requiring a reason as the ground of a conclusion, and asking for a cause for the occurrence of a real event. As for the Scholastic Philosophers of later times, the law of causality was in their eyes an axiom above investigation: "*non inquirimus an causa sit, quia nihil est per se notius,*" says Suarez.[1] At the same time they held fast to the above quoted Aristotelian classification; but, as far as I know at least, they equally failed to arrive at a clear idea of the necessary distinction of which we are here speaking.

§ 7. *Descartes.*

For we find even the excellent Descartes, who gave the first impulse to subjective reflection and thereby became the father of modern philosophy, still entangled in confusions for which it is difficult to account; and we shall soon see to what serious and deplorable consequences these confusions have led with regard to Metaphysics. In the "*Responsio ad secundas objectiones in meditationes de prima philosophia,*" *axioma i.* he says: *Nulla res existit, de qua non possit quæri, quænam sit causa, cur existat. Hoc enim de ipso Deo quæri potest, non quod indigeat ulla causa ut existat,*

---

[1] Suarez, "Disp." 12, sect. 1.

sed quia ipsa ejus naturæ immensitas est CAUSA, SIVE RATIO, *propter quam nulla causa indiget ad existendum.* He ought to have said: The immensity of God is a logical reason from which it follows, that God needs no cause; whereas he confounds the two together and obviously has no clear consciousness of the difference between reason and cause. Properly speaking however, it is his intention which mars his insight. For here, where the law of causality demands a *cause*, he substitutes a *reason* instead of it, because the latter, unlike the former, does not immediately lead to something beyond it; and thus, by means of this very axiom, he clears the way to the *Ontological Proof* of the existence of God, which was really his invention, for Anselm had only indicated it in a general manner. Immediately after these axioms, of which I have just quoted the first, there comes a formal, quite serious statement of the Ontological Proof, which, in fact, already lies within that axiom, as the chicken does within the egg that has been long brooded over. Thus, while everything else stands in need of a cause for its existence, the *immensitas* implied in the conception of the Deity—who is introduced to us upon the ladder of the Cosmological Proof—suffices in lieu of a cause or, as the proof itself expresses it: *in conceptu entis summe perfecti existentia necessaria continetur.* This, then, is the sleight-of-hand trick, for the sake of which the confusion, familiar even to Aristotle, of the two principal meanings of the principle of sufficient reason, has been used directly *in majorem Dei gloriam.*

Considered by daylight, however, and without prejudice, this famous Ontological Proof is really a charming joke. On some occasion or other, some one excogitates a conception, composed out of all sorts of predicates, among which however he takes care to include the predicate actuality or existence, either openly stated or wrapped up for decency's sake in some other predicate, such as *perfectio*, *immensitas*, or something of the kind. Now, it is well known,—that, from a given conception, those predicates which are essential to it—*i.e.*, without which it cannot be thought—and likewise the predicates which are essential to those predicates themselves, may be extracted by means of purely logical analyses, and consequently have *logical* truth: that is, they have their reason of knowledge in the given conception. Accordingly the predicate reality or existence is now extracted from this arbitrarily thought conception, and an object corresponding to it is forthwith presumed to have real existence independently of the conception.

> "Wär' der Gedank' nicht so verwünscht gescheut,
> Man wär' versucht ihn herzlich dumm zu nennen."[1]

After all, the simplest answer to such ontological demonstrations is: "All depends upon the source whence you have derived your conception: if it be taken from experience, all well and good, for in this case its object exists and needs no further proof; if, on the contrary, it has been hatched in your own *sinciput*, all its predicates are of no avail, for it is a mere phantasm. But we form an unfavourable prejudice against the pretensions of a theology which needed to have recourse to such proofs as this in order to gain a footing on the territory of philosophy, to which it is quite foreign, but on which it longs to trespass. But oh! for the prophetic wisdom of Aristotle! He had never even heard of the Ontological Proof; yet as though he could detect this piece of scholastic jugglery through the shades of coming darkness and were anxious to bar the road to it, he carefully shows[2] that defining a thing and proving its existence are two different matters, separate to all eternity;

---

[1] "Were not the thought so cursedly acute,
One might be tempted to declare it silly."
SCHILLER, "Wallenstein-Trilogie. Piccolomini," Act ii. Sc. 7.

[2] Aristot., "Analyt. post." c. 7.

since by the one we learn *what* it is that is meant, and by the other *that* such a thing exists. Like an oracle of the future, he pronounces the sentence: *τὸ δ' εἶναι οὐκ οὐσία οὐδενί· οὐ γὰρ γένος τὸ ὄν*: (ESSE *autem nullius rei essentia est, quandoquidem ens non est genus*) which means: "Existence never can belong to the essence of a thing." On the other hand, we may see how great was Herr von Schelling's veneration for the Ontological Proof in a long note, p. 152, of the 1st vol. of his "Philosophische Schriften" of 1809. We may even see in it something still more instructive, *i.e.*, how easily Germans allow sand to be thrown in their eyes by impudence and blustering swagger. But for so thoroughly pitiable a creature as Hegel, whose whole pseudo-philosophy is but a monstrous amplification of the Ontological Proof, to have undertaken its defence against Kant, is indeed an alliance of which the Ontological Proof itself might be ashamed, however little it may in general be given to blushing. How can I be expected to speak with deference of men, who have brought philosophy into contempt?

§ 8. *Spinoza.*

Although Spinoza's philosophy mainly consists in the negation of the double dualism between God and the world and between soul and body, which his teacher, Descartes, had set up, he nevertheless remained true to his master in confounding and interchanging the relation between reason and consequence with that between cause and effect; he even endeavoured to draw from it a still greater advantage for his own metaphysics than Descartes for his, for he made this confusion the foundation of his whole Pantheism.

A conception contains *implicite* all its essential predicates, so that they may be developed out of it *explicite* by means of mere analytical judgments: the sum total of them being its definition. This definition therefore differs from the conception itself merely in form and not in content; for it consists of judgments which are all contained within that conception, and therefore have their reason in it, in as far as they show its essence. We may accordingly look upon these judgments as the consequences of that conception, considered as their reason. Now this relation between a conception and the judgments founded upon it and susceptible of being developed out of it by analysis, is precisely the relation between Spinoza's so-called God and the world, or rather between the one and only substance and its numberless accidents (*Deus, sive substantia constans infinitis attributis*[1]—*Deus, sive omnia Dei attributa*). It is therefore the relation in knowledge of the *reason* to its consequent; whereas true Theism (Spinoza's Theism is merely nominal) assumes the relation of the *cause* to its effect, in which the cause remains different and separate from the consequence, not only in the way in which we consider them, but really and essentially, therefore in themselves to all eternity. For the word God, honestly used, means a cause such as this of the world, with the addition of personality. An impersonal God is, on the contrary, a *contradictio in adjecto.* Now as nevertheless, even in the case as stated by him, Spinoza desired to retain the word God to express substance, and explicitly called this the *cause* of the world, he could find no other way to do it than by completely intermingling the two relations, and confounding the principle of the reason of knowledge with the principle of causality. I call attention to the following passages in corroboration of this statement. *Notandum, dari necessario unius cujusque rei existentis certam aliquam* CAUSAM, *propter quam existit. Et notandum, hanc causam, propter quam aliqua res existit, vel debere contineri in ipsa natura et* DEFINITIONE

---

[1] Spinoza, "Eth." i. prop. 11.

rei existentis (nimirum quod ad ipsius naturam pertinet existere), vel debere EXTRA *ipsam dari.*[1] In the last case he means an efficient cause, as appears from what follows, whereas in the first he means a mere reason of knowledge; yet he identifies both, and by this means prepares the way for identifying God with the world, which is his intention. This is the artifice of which he always makes use, and which he has learnt from Descartes. He substitutes a cause acting from without, for a reason of knowledge lying within, a given conception. *Ex necessitate divinæ naturæ omnia, quæ sub intellectum infinitum cadere possunt, sequi debent.*[2] At the same time he calls God everywhere the cause of the world. *Quidquid existit Dei potentiam, quæ omnium rerum* CAUSA *est, exprimit.*[3]—*Deus est omnium rerum* CAUSA *immanens, non vero transiens.*[4]—*Deus non tantam est* CAUSA EFFICIENS *rerum existentiæ, sed etiam essentiæ.*[5]—*Ex data quacunque* IDEA *aliquis* EFFECTUS *necessario sequi debat.*[6]—And: *Nulla res nisi a causa externa potest destrui.*[7]—Demonstr. DEFINITIO *cujuscunque rei, ipsius essentiam* (essence, nature, as differing from *existentia*, existence), *affirmat, sed non negat; sive rei essentiam ponit, sed non tollit. Dum itaque ad rem ipsam tantum, non autem ad causas externas attendimus, nihil in eadem poterimus invenire, quod ipsam possit destruere.* This means, that as no conception can contain anything which contradicts its definition, *i.e.*, the sum total of its predicates, neither can an existence contain anything which might become a cause of its destruction. This view, however, is brought to a climax in the somewhat lengthy second demonstration of the 11th Proposition, in which he confounds a cause capable of destroying or annihilating a being, with a contradiction contained in its definition and therefore destroying that definition. His need of confounding cause with reason here becomes so urgent, that he can never say *causa* or *ratio* alone, but always finds it necessary to put *ratio seu causa*. Accordingly, this occurs as many as eight times in the same page, in order to conceal the subterfuge. Descartes had done the same in the above-mentioned axiom.

---

[1] Spinoza, "Eth." P. 1. prop. 8, schol. 2.

[2] *Ibid.* Prop. 16.

[3] *Ibid.* Prop. 36, demonstr.

[4] *Ibid.* Prop. 18.

[5] *Ibid.* Prop. 25.

[6] "Eth." P. iii. prop. 1, demonstr.

[7] *Ibid.* Prop. 4.

Thus, properly speaking, Spinoza's Pantheism is merely the *realisation* of Descartes' Ontological Proof. First, he adopts Descartes' ontotheological proposition, to which we have alluded above, *ipsa naturæ Dei immensitas est* CAUSA SIVE RATIO, *propter quam nulla causa indiget ad existendum*, always saying *substantia* instead of *Deus* (in the beginning); and then he finishes by *substantiæ essentia necessario involvit existentiam, ergo erit substantia* CAUSA SUI.[1] Therefore the very same argument which Descartes had used to prove the existence of God, is used by Spinoza to prove the existence of the world,—which consequently needs no God. He does this still more distinctly in the 2nd Scholium to the 8th Proposition: *Quoniam ad naturam substantia pertinet existere, debet ejus definitio necessariam existentiam involvere, et consequenter ex sola ejus definitione debet ipsius existentia concludi.* But this substance is, as we know, the world. The demonstration to Proposition 24 says in the same sense: *Id, cujus natura in se considerata* (*i.e.*, in its definition) *involvit existentiam, est* CAUSA SUI.

For what Descartes had stated in an exclusively *ideal* and *subjective* sense, *i.e.*, only for us, for *cognitive purposes* —in this instance for the sake of proving the existence of God—Spinoza took in a *real* and *objective* sense, as the actual relation of God to the world. According to Descartes, the existence of God is contained in the *conception* of God, therefore it becomes an argument for his actual being: according to Spinoza, God is himself contained in the world. Thus what, with Descartes, was only reason of knowledge, becomes, with Spinoza, reason of fact. If the former, in his Ontological Proof, taught that the *existentia* of God is a consequence of the *essentia* of God, the latter turns this into *causa sui*, and boldly opens his Ethics with: *per causam sui intelligo id, cujus essentia* (conception) *involvit existentiam*, remaining deaf to Aristotle's warning cry, *τὸ δ᾽ εἶναι οὐκ οὐσία οὐδενί*! Now, this is the most palpable confusion of *reason* and *cause*. And if Neo-Spinozans (Schellingites, Hegelians, &c.), with whom words are wont to pass for thoughts, often indulge in pompous, solemn admiration for this *causa sui*, for my own part I see nothing but a *contradictio in adjecto* in this same *causa sui*, a *before* that is *after*, an audacious command to us, to sever arbitrarily the eternal causal chain—something, in short, very like the proceeding of that Austrian, who finding himself unable to reach high enough to fasten the clasp on his tightly-strapped shako, got upon a chair. The right emblem for *causa sui* is Baron Münchhausen, sinking on horseback into the water, clinging by the legs to his horse and pulling both himself and the animal out by his own pigtail, with the motto underneath: *Causa sui*.

---

[1] "Eth." P. i. prop. 7.

Let us finally cast a look at the 16th proposition of the 1st book of the Ethics. Here we find Spinoza concluding from the proposition, *ex data cujuscunque rei definitione plures proprietates intellectus concludit, quæ revera ex eadem necessario sequuntur*, that *ex necessitate divinæ naturæ* (*i.e.*, taken as a reality), *infinita infinitis modis sequi debent*: this God therefore unquestionably stands in the same relation to the world as a conception to its definition. The corollary, *Deum omnium rerum esse* CAUSAM EFFICIENTEM, is nevertheless immediately connected with it. It is impossible to carry the confusion between reason and cause farther, nor could it lead to graver consequences than here. But this shows the importance of the subject of the present treatise.

In endeavouring to add a third step to the climax in question, Herr von Schelling has contributed a small afterpiece to these errors, into which two mighty intellects of the past had fallen owing to insufficient clearness in thinking. If Descartes met the demands of the inexorable law of causality, which reduced his God to the last straits, by substituting a reason instead of the cause required, in order thus to set the matter at rest; and if Spinoza made a real cause out of this reason, *i.e.*, *causa sui*, his God thereby becoming the world itself: Schelling now made reason and consequent separate in God himself.[1] He thus gave the thing still greater consistency by elevating it to a real, substantial hypostasis of reason and consequent, and introducing us to something "in God, which is not himself, but his reason, as a primary reason, or rather reason beyond reason (abyss)." *Hoc quidem vere palmarium est.*—It is now known that Schelling had taken the whole fable from Jacob Böhme's "Full account of the terrestrial and celestial mystery;" but what appears to me to be less well known, is the source from which Jacob Böhme himself had taken it, and the real birth-place of this so-called *abyss*, wherefore I now take the liberty to mention it. It is the *βυθός*, i.e. *abyssus*, *vorago*, bottomless pit, reason beyond reason of the Valentinians (a heretical sect of the second century) which, in silence—co-essential with itself—engendered intelligence and the world, as Irenæus[2] relates in the following terms: *λέγουσι γάρ τινα εἶναι ἐν ἀοράτοις, καὶ ἀκατονομάστοις ὑψώμασι τέλειον Αἰῶνα προόντα· τοῦτον δὲ καὶ προαρχήν, καὶ προπάτορα, καὶ βυθὸν καλοῦσιν.*—

---

[1] Schelling, "Abhandlung von der menschlichen Freiheit."

[2] Irenæus, "Contr. hæres." lib. i. c. 1.

—Ὑπάρχοντα δὲ αὐτὸν ἀχώρητον καὶ ἀόρατον, ἀΐδιόν τε καὶ ἀγέννητον, ἐν ἡσυχίᾳ καὶ ἠρεμίᾳ πολλῇ γεγονέναι ἐν ἀπείροις αἰῶσι χρόνων. Συνυπάρχειν δὲ αὐτῷ καὶ Ἔννοιαν, ἣν δὲ καὶ Χάριν, καὶ Σιγὴν ὀνομάζουσι· καὶ ἐννοηθῆναί ποτε ἀφ᾽ ἑαυτοῦ προβαλέσθαι τὸν βυθὸν τοῦτον ἀρχὴν τῶν πάντων, καὶ καθάπερ σπέρμα τὴν προβολὴν ταύτην (ἣν προβαλέσθαι ἐνενοήθη) καθέσθαι, ὡς ἐν μήτρᾳ, τῇ συνυπαρχούσῃ, ἑαυτῷ Σιγῇ. Ταύτην δὲ, ὑποδηξαμένην τὸ σπέρμα τοῦτο, καὶ ἐγκύμονα γενομένην, ἀποκυῆσαι Νοῦν, ὅμοιόν τε καὶ ἴσον τῷ προβαλόντι, καὶ μόνον χωροῦντα τὸ μέγεθος τοῦ Πατρός. Τὸν δὲ νοῦν τοῦτον καὶ μονογενῆ καλοῦσι, καὶ ἀρχὴν τῶν πάντων.[1] (*Dicunt enim esse quendam in sublimitatibus illis, quæ nec oculis cerni, nec nominari possunt, perfectum Æonem præexistentem, quem et proarchen, et propatorem, et* Bythum *vocant. Eum autem, quum incomprehensibilis et invisibilis, sempiternus idem et ingenitus esset, infinitis temporum seculis in summa quiete ac tranquillitate fuisse. Unâ etiam cum eo Cogitationem exstitisse, quam et Gratiam et Silentium (Sigen) nuncupant. Hunc porro* Bythum *in animum aliquando induxisse, rerum omnium initium proferre, atque hanc, quam in animum induxerat, productionem, in Sigen (silentium) quæ unâ cum eo erat, non secus atque in vulvam demisisse. Hanc vero, suscepto hoc semine, prægnantem effectam pepe-*

---

[1] "For they say that in those unseen heights which have no name there is a pre-existing, perfect Æon; this they also call fore-rule, forefather and the depth.—They say, that being incomprehensible and invisible, eternal and unborn, he has existed during endless Æons in the deepest calmness and tranquillity; and that coexisting with him was Thought, which they also call Grace and Silence. This Depth once bethought him to put forth from himself the beginning of all things and to lay that offshoot—which he had resolved to put forth—like a sperm into the coexisting Silence, as it were into a womb. Now this Silence, being thus impregnated and having conceived, gave birth to Intellect, a being which was like and equal to its Creator, and alone able to comprehend the greatness of its father. This Intellect also they call the Only-begotten and the Beginning of all things." [Tr.'s add.]

risse Intellectum, parenti suo parem et æqualem, atque ita comparatum, ut solus paternæ magnitudinis capax esset. Atque hunc Intellectum et Monogenem et Patrem et principum omnium rerum appellant.)

Somehow or other this must have come to Jacob Böhme's hearing from the History of Heresy, and Herr von Schelling must have received it from him in all faith.

§ 9. *Leibnitz.*

It was Leibnitz who first formally stated the Principle of Sufficient Reason as a main principle of all knowledge and of all science. He proclaims it very pompously in various passages of his works, giving himself great airs, as though he had been the first to invent it; yet all he finds to say about it is, that everything must have a sufficient reason for being as it is, and not otherwise: and this the world had probably found out before him. True, he makes casual allusions to the distinction between its two chief significations, without, however, laying any particular stress upon it, or explaining it clearly anywhere else. The principal reference to it is in his "Principia Philosophiæ," § 32, and a little more satisfactorily in the French version, entitled "Monadologie": *En vertu du principe de la raison suffisante, nous considérons qu'aucun fait ne sauroit se trouver vrai ou existant, aucune énonciation véritable, sans qu'il y ait une raison suffisante, pourquoi il en soit ainsi et non pas autrement.*[1]

§ 10. *Wolf.*

The first writer who explicitly separated the two chief significations of our principle, and stated the difference between them in detail, was therefore Wolf. Wolf, however, does not place the principle of sufficient reason in Logic, as is now the custom, but in Ontology. True, in § 71 he urges the necessity of not confounding the principle of sufficient reason of knowing with that of cause and effect; still he does not clearly determine here wherein the difference consists. Indeed, he himself mistakes the one for the other; for he quotes instances of cause and effect in confirmation of the *principium rationis sufficientis* in this very chapter, *de ratione sufficiente*, §§ 70, 74, 75, 77, which, had he really wished to preserve that distinction, ought rather to have been quoted in the chapter *de causis* of the same work. In said chapter he again brings forward precisely similar instances, and once more enunciates the *principium cognoscendi* (§ 876), which does not certainly belong to it, having been already discussed, yet which serves to introduce the immediately following clear and definite distinction between this principle and the law of causality, §§ 881-884. *Principium*, he continues, *dicitur id, quod in se continet rationem alterius;* and he distinguishes *three* kinds: 1. PRINCIPIUM FIENDI (*causa*), which he defines as *ratio actualitatis alterius*, e.g., *si lapis calescit, ignis aut radii solares sunt rationes, cur calor lapidi insit.*—2. PRINCIPIUM ESSENDI, which he defines as *ratio possibilitatis alterius; in eodem exemplo, ratio possibilitatis, cur lapis calorem recipere possit, est in essentia seu modo compositionis lapidis.* This last conception seems to me inadmissible. If it has any meaning at all, possibility means correspondence with the general conditions of experience known to us *à priori*, as Kant has sufficiently shown. From these conditions we know, with respect to Wolf's instance of the stone, that changes are possible as effects proceeding from causes: we know, that is, that one state can succeed another, if the former contains the conditions for the latter. In this case we find, as effect, the state of being warm in the stone; as cause, the preceding state of a limited capacity for warmth in the stone and its contact with free heat. Now, Wolf's naming the first mentioned property of this state *principium essendi*, and the second, *principium fiendi*, rests upon a delusion caused by the fact that, so far as the stone is concerned, the conditions are more lasting and can therefore wait longer for the others. That the stone should be as it is: that is, that it should be chemically so constituted as to bring with it a particular degree of specific heat, consequently a capacity for heat which stands in inverse proportion to its specific heat; that besides it should, on the other hand, come into contact with free heat, is the consequence of a whole chain of antecedent causes, all of them *principia fiendi*; but it is the coincidence of circumstances on both sides which primarily constitutes that condition, upon which, as cause, the becoming warm depends, as effect. All this leaves no room for Wolf's *principium essendi*, which I therefore do not admit, and concerning which I have here entered somewhat into detail, partly because I mean to use the word myself later on in a totally different sense; partly also, because this explanation contributes to facilitate the comprehension of the law of causality.—3. Wolf, as we have said, distinguishes a PRINCIPIUM COGNOSCENDI, and refers also under *causa* to a *causa impulsiva, sive ratio voluntatem determinans.*

---

[1] Compare with this § 44 of his "Theodicée," and his 5th letter to Clarke, § 125.

§ 11. *Philosophers between Wolf and Kant.*

Baumgarten repeats the Wolfian distinctions in his "Metaphysica," §§ 20-24, and §§ 306-313.

Reimarus, in his "Vernunftlehre,"[1] § 81, distinguishes 1. *Inward reason*, of which his explanation agrees with Wolf's *ratio essendi*, and might even be applicable to the *ratio cognoscendi*, if he did not transfer to things what only applies to conceptions; 2. *Outward reason*, i.e. *causa*.—§ 120

---

[1] Doctrine of Reason.

et seqq., he rightly defines the *ratio cognoscendi* as a condition of the proposition; but in an example, § 125, he nevertheless confounds it with cause.

Lambert, in the new Organon, does not mention Wolf's distinctions; he shows, however, that he recognizes a difference between reason of knowledge and cause;[1] for he says that God is the *principium essendi* of truths, and that truths are the *principia cognoscendi* of God.

Plattner, in his Aphorisms, § 868, says: "What is called reason and conclusion within our knowledge (*principium cognoscendi, ratio—rationatum*), is in reality cause and effect (*causa efficiens—effectus*). Every cause is a reason, every effect a conclusion." He is therefore of opinion that cause and effect, in reality, correspond to the conceptions reason and consequence in our thought; that the former stand in a similar relation with respect to the latter as substance and accident, for instance, to subject and predicate, or the quality of the object to our sensation of that quality, &c. &c. I think it useless to refute this opinion, for it is easy to see that premisses and conclusion in judgments stand in an entirely different relation to one another from a knowledge of cause and effect; although in individual cases even knowledge of a cause, as such, may be the reason of a judgment which enunciates the effect.[2]

§ 12. *Hume.*

No one before this serious thinker had ever doubted what follows. First, and before all things in heaven and on earth, is the Principle of Sufficient Reason in the form of the Law of Causality. For it is a *veritas æterna*: *i.e.* it is in and by itself above Gods and Fate; whereas everything else, the understanding, for instance, which thinks that principle, and no less the whole world and whatever may be its cause—atoms, motion, a Creator, *et cætera*—is what it is only in accordance with, and by virtue of, that principle. Hume was the first to whom it occurred to inquire whence this law of causality derives its authority, and to demand its credentials. Everyone knows the result at which he arrives: that causality is nothing beyond the empirically perceived succession of things and states in Time, with which habit has made us familiar. The fallacy of this result is felt at once, nor is it difficult to refute. The merit lies in the question itself; for it became the impulse and starting-point for Kant's profound researches, and by their means led to an incomparably deeper and more thorough view of Idealism than the one which had hitherto existed, and which was chiefly Berkeley's. It led to transcendental Idealism, from which arises the conviction, that the world is as dependent upon us, as a whole, as we are dependent upon it in detail. For, by pointing out the existence of those transcendental principles, as such, which enable us to determine *à priori*, *i.e.* before all experience, certain points concerning objects and their possibility, he proved that these things could not exist, as they present themselves to us, independently of our knowledge. The resemblance between a world such as this and a dream, is obvious.

---

[1] Lambert, "New Organon," vol. i. § 572.

[2] Compare § 36. of this treatise.

§ 13. *Kant and his School.*

Kant's chief passage on the Principle of Sufficient Reason is in a little work entitled "On a discovery, which is to permit us to dispense with all Criticism of Pure Reason."[1] Section I., *lit.* A. Here he strongly urges the distinction between "the logical (formal) principle of cognition 'every proposition must have its reason,' and the transcendental (material) principle 'every thing must have its cause,'" in his controversy with Eberhard, who had identified them as one and the same.—I intend myself to criticize Kant's proof of the *à priori* and consequently transcendental character of the law of causality further on in a separate paragraph, after having given the only true proof.

---

[1] "Ueber eine Entdeckung, nach der alle Kritik der reinen Vernunft entbehrlich gemacht werden soll."

With these precedents to guide them, the several writers on Logic belonging to Kant's school; Hofbauer, Maass, Jakob, Kiesewetter and others, have defined pretty accurately the distinction between reason and cause. Kiesewetter, more especially, gives it thus quite satisfactorily:[1] "Reason of knowledge is not to be confounded with reason of fact (cause). The Principle of Sufficient Reason belongs to Logic, that of Causality to Metaphysics.[2] The former is the fundamental principle of thought; the latter that of experience. Cause refers to real things, logical reason has only to do with representations."

Kant's adversaries urge this distinction still more strongly. G. E. Schultze[3] complains that the Principle of Sufficient Reason is confounded with that of Causality. Salomon Maimon[4] regrets that so much should be said about the sufficient reason without an explanation of what is meant by it, while he blames Kant[5] for deriving the principle of causality from the logical form of hypothetical judgments.

F. H. Jacobi[6] says, that by the confounding of the two conceptions, reason and cause, an illusion is produced, which has given rise to various false speculations; and he points out the distinction between them after his own fashion. Here, however, as is usual with him, we find a good deal more of self-complacent phrase-jugglery than of serious philosophy.

---

[1] Kiesewetter, "Logik," vol. i. p. 16.

[2] *Ibid.* p. 60.

[3] G. E. Schultze, "Logik," § 19, Anmerkung 1, und § 63.

[4] Sal. Maimon, "Logik," p. 20, 21. [5] *Ibid.* "Vorrede," p. xxiv.

[6] Jacobi, "Briefe über die Lehre des Spinoza," Beilage 7, p. 414.

How Herr von Schelling finally distinguishes reason from cause, may be seen in his "Aphorisms introductory to the Philosophy of Nature,"[1] § 184, which open the first book of the first volume of Marcus and Schelling's "Annals of Medecine." Here we are taught that gravity is the *reason* and light the *cause* of all things. This I merely quote as a curiosity; for such random talk would not otherwise deserve a place among the opinions of serious and honest inquirers.

§ 14. *On the Proofs of the Principle.*

We have still to record various fruitless attempts which have been made to prove the Principle of Sufficient Reason, mostly without clearly defining in which sense it was taken: Wolf's, for instance, in his Ontology, § 70, repeated by Baumgarten in his "Metaphysics," § 20. It is useless to repeat and refute it here, as it obviously rests on a verbal quibble. Plattner[2] and Jakob[3] have tried other proofs, in which, however, the circle is easily detected. I purpose dealing with those of Kant further on, as I have already said. Since I hope, in the course of this treatise, to point out the different laws of our cognitive faculties, of which the principle of sufficient reason is the common expression, it will result as a matter of course, that this principle cannot be proved, and that, on the contrary, Aristotle's remark:[4] λόγον ζητοῦσι ὧν οὐκ ἔστι λόγος.

---

[1] "Aphorismen zur Einleitung in die Naturphilosophie."

[2] Plattner, "Aphorismen," § 828.

[3] Jakob, "Logik und Metaphysik," p. 38 (1794).

[4] Aristotle, "Metaph." iii. 6. "They seek a reason for that which has no reason; for the principle of demonstration is not demonstration." [Tr.'s add.] Compare with this citation "Analyt. post." i. 2.

ἀποδείξεως γὰρ ἀρχὴ οὐκ ἀπόδειξίς ἐστι (*rationem eorum quærant, quorum non est ratio: demonstrationis enim principium non est demonstratio*) may be applied with equal propriety to all these proofs. For every proof is a reference to something already recognised; and if we continue requiring a proof again for this something, whatever it be, we at last arrive at certain propositions which express the forms and laws, therefore the conditions, of all thought and of all knowledge, in the application of which consequently all thought and all knowledge consists: so that certainty is nothing but correspondence with those conditions, forms, and laws, therefore their own certainty cannot again be ascertained by means of other propositions. In the fifth chapter I mean to discuss the kind of truth which belongs to propositions such as these.

To seek a proof for the Principle of Sufficient Reason, is, moreover, an especially flagrant absurdity, which shows a want of reflection. Every proof is a demonstration of the reason for a judgment which has been pronounced, and which receives the predicate *true* in virtue precisely of that demonstration. This necessity for a reason is exactly what the Principle of Sufficient Reason expresses. Now if we require a proof of it, or, in other words, a demonstration of its reason, we thereby already assume it to be true, nay, we found our demand precisely upon that assumption, and thus we find ourselves involved in the circle of exacting a proof of our right to exact a proof.

CHAPTER III.

INSUFFICIENCY OF THE OLD AND OUTLINES OF A NEW DEMONSTRATION.

§ 15. *Cases which are not comprised among the old established meanings of the Principle.*

FROM the summary given in the preceding chapter we gather, that two distinct applications of the principle of sufficient reason have been recognized, although very gradually, very tardily, and not without frequent relapses into error and confusion: the one being its application to judgments, which, to be true, must have a reason; the other, its application to changes in material objects, which must always have a cause. In both cases we find the principle of sufficient reason authorizing us to ask *why?* a quality which is essential to it. But are all the cases in which it authorizes us to ask *why* comprised in these two relations? If I ask: Why are the three sides of this triangle equal? the answer is: Because the three angles are so. Now, is the equality of the angles the cause of the equality of the sides? No; for here we have to do with no change, consequently with no effect which must have a cause.—Is it merely a logical reason? No; for the equality of the angle is not only a proof of the equality of the sides, it is not only the foundation of a judgment: mere conceptions alone would never suffice to explain why the sides must be equal, because the angles are so; for the conception of the equality of the sides is not contained in that of the equality of the angles. Here therefore we have no connection between conceptions and judgments, but between sides and angles. The equality of the angles is not the *direct*, but the *indirect* reason, by which we know the equality of the sides; for it is the reason why a thing is such as it is (in this case, that the sides are equal): the angles being equal, the sides must therefore be equal. Here we have a necessary connection between angles and sides, not a direct, necessary connection between two judgments.—Or again, if I ask why *infecta facta*, but never *facta infecta fieri possunt*, consequently why the past is absolutely irrevocable, the future inevitable, even this does not admit of purely logical proof by means of mere abstract conceptions, nor does it belong either to causality, which only rules *occurrences* within Time, not Time itself. The present hour hurled the preceding one into the bottomless pit of the past, not through causality, but immediately, through its mere existence, which existence was nevertheless inevitable. It is impossible to make this comprehensible or even clearer by means of mere conceptions; we recognise it, on the contrary, quite directly and instinctively, just as we recognize the difference between right and left and all that depends upon it: for instance, that our left glove will not fit our right hand, &c. &c.

Now, as all those cases in which the principle of sufficient reason finds its application cannot therefore be reduced to logical reason and consequence and to cause and effect, the law of specification cannot have been sufficiently attended to in this classification. The law of homogeneity, however, obliges us to assume, that these cases cannot differ to infinity, but that they may be reduced to certain species. Now, before attempting this classification, it will be necessary to determine what is peculiar to the principle of sufficient reason in all cases, as its special characteristic; because the conception of the genus must always be determined before the conception of the species.

§ 16. *The Roots of the Principle of Sufficient Reason.*

Our knowing consciousness, which manifests itself as outer and inner Sensibility (or receptivity) *and as Understanding and Reason, subdivides itself into Subject and Object and contains nothing else. To be Object for the Subject and to be our representation, are the same thing. All our representations stand towards one another in a regulated connection, which may be determined* À PRIORI, *and on account of which, nothing existing separately and independently, nothing single or detached, can become an Object for us.* It is this connection which is expressed by the Principle of Sufficient Reason in its generality. Now, although, as may be gathered from what has gone before, this connection assumes different forms according to the different kinds of objects, which forms are differently expressed by the Principle of Sufficient Reason; still the connection retains what is common to all these forms, and this is expressed in a general and abstract way by our principle. The relations upon which it is founded, and which will be more closely indicated in this treatise, are what I call the Root of the Principle of Sufficient Reason. Now, on closer inspection, according to the laws of homogeneity and of specification, these relations separate into distinct species, which differ widely from each other. Their number, however, may be reduced to *four*, according to the *four* classes into which everything that can become an object for us—that is to say, all our representations—may be divided. These classes will be stated and considered in the following four chapters.

We shall see the Principle of Sufficient Reason appear under a different form in each of them; but it will also show itself under all as the same principle and as derived from the said root, precisely because it admits of being expressed as above.

CHAPTER IV.

ON THE FIRST CLASS OF OBJECTS FOR THE SUBJECT, AND THAT FORM OF THE PRINCIPLE OF SUFFICIENT REASON WHICH PREDOMINATES IN IT.

§ 17. *General Account of this Class of Objects.*

THE first class of objects possible to our representative faculty, is that of *intuitive, complete, empirical* representations. They are *intuitive* as opposed to mere thoughts, *i.e.* abstract conceptions; they are *complete*, inasmuch as, according to Kant's distinction, they not only contain the formal, but also the material part of phenomena; and they are *empirical*, partly as proceeding, not from a mere connection of thoughts, but from an excitation of feeling in our sensitive organism, as their origin, to which they constantly refer for evidence as to their reality: partly also because they are linked together, according to the united laws of Space, Time and Causality, in that complex without beginning or end which forms our *Empirical Reality*. As, nevertheless, according to the result of Kant's teaching, this *Empirical Reality* does not annul their *Transcendental Ideality*, we shall consider them here, where we have only to do with the formal elements of knowledge, merely as representations.

§ 18. *Outline of a Transcendental Analysis of Empirical Reality.*

The forms of these representations are those of the inner and outer sense; namely, *Time* and *Space*. But these are only *perceptible* when *filled*. Their *perceptibility* is *Matter*, to which I shall return further on, and again in § 21. *If Time were the only form* of these representations, there could be no *coexistence*, therefore nothing *permanent* and no *duration*. For *Time* is only perceived when filled, and its course is only perceived by the *changes* which take place in that which fills it. The *permanence* of an object is therefore only recognized by contrast with the *changes* going on in other objects *coexistent* with it. But the representation of *coexistence* is impossible in Time alone; it depends, for its completion, upon the representation of *Space*; because, in mere Time, all things *follow one another*, and in mere Space all things are *side by side*; it is accordingly only by the combination of Time and Space that the representation of coexistence arises.

On the other hand, were Space the sole form of this class of representations, there would be no *change*; for change or alteration is *succession* of states, and *succession* is only possible in *Time*. We may therefore define Time as the possibility of opposite states in one and the same thing.

Thus we see, that although infinite divisibility and infinite extension are common to both Time and Space, these two forms of empirical representations differ fundamentally, inasmuch as what is essential to the *one* is without any meaning at all for the *other*: juxtaposition having no meaning in Time, succession no meaning in Space. The empirical representations which belong to the orderly complex of reality, appear notwithstanding in both forms together; nay, the *intimate union* of both is the condition of reality which, in a sense, grows out of them, as a product grows out of its factors. Now it is the Understanding which, by means of its own peculiar function, brings about this *union* and connects these heterogeneous forms in such a manner, that *empirical reality*—albeit only for that Understanding—arises out of their mutual interpenetration, and arises as a collective representation, forming a complex, held together by the forms of the principle of sufficient reason, but whose limits are problematical. Each single representation belonging to this class is a part of this complex, each one taking its place in it according to laws known to us *à priori;* in it therefore countless objects *coexist,* because Substance, *i.e.* Matter, remains permanent in spite of the ceaseless flow of Time, and because its states change in spite of the rigid immobility of Space. In this complex, in short, the whole objective, real world exists for us. The reader who may be interested in this, will find the present rough sketch of the analysis of empirical reality further worked out in § 4 of the first volume of "Die Welt als Wille und Vorstellung,"[1] where a closer explanation is given of the way in which the Understanding effects this union and thus creates for itself the empirical world. He will also find a very important help in the table, "*Prædicabilia à priori* of Time, Space, and Matter," which is added to the fourth chapter of the second volume of the same work, and which I recommend to his attention, as it especially shows how the contrasts of Time and Space are equally balanced in Matter, as their product, under the form of Causality.

We shall now proceed to give a detailed exposition of that function of the Understanding which is the basis of empirical reality; only we must first, by a few incidental explanations, remove the more immediate objections which the fundamental idealism of the view I have adopted might encounter.

---

[1] Vol. i. p. 12, and *seqq.* of the 1st edition; p. 9 of the 3rd edition.

§ 19. *Immediate Presence of Representations.*

Now as, notwithstanding this union through the Understanding of the forms of the inner and outer sense in representing Matter and with it a permanent outer world, all *immediate* knowledge is nevertheless acquired by the Subject through the *inner* sense alone—the outer sense being again Object for the inner, which in its turn perceives the perceptions of the outer—and as therefore, with respect to the *immediate presence* of representations in its consciousness, the Subject remains under the rule of *Time* alone, as the form of the *inner sense*:[1] it follows, that only one representation can be present to it (the Subject) at the same time, although that one may be very complicated. When we speak of representations as *immediately present*, we mean, that they are not only known in the union of Time and Space effected by the Understanding—an intuitive faculty, as we shall soon see—through which the collective representation of empirical reality arises, but that they are known in mere Time alone, as representations of the inner sense, and just at the neutral point at which its two currents separate, called the *present*. The necessary condition mentioned in the preceding paragraph for the immediate presence of a representation of this class, is its causal action upon our senses and consequently upon our organism, which itself belongs to this class of objects, and is therefore subject to the causal law which predominates in it and which we are now about to examine. Now as therefore, on the one hand, according to the laws of the inner and outer world, the Subject cannot stop short at that one representation; but as, on the other hand, there is no coexistence in Time alone: that single representation must always vanish and be superseded by others, in virtue of a law which we cannot determine *à priori*, but which depends upon circumstances soon to be mentioned. It is moreover a well-known fact, that the imagination and dreams reproduce the immediate presence of representations; the investigation of that fact, however, belongs to empirical Psychology. Now as, notwithstanding the transitory, isolated nature of our representations with respect to their immediate presence in our consciousness, the Subject nevertheless retains the representation of an all-comprehensive complex of reality, as described above, by means of the function of the Understanding; representations have, on the strength of this antithesis, been viewed, as something quite different when considered as belonging to that complex than when considered with reference to their immediate presence in our consciousness. From the former point of view they were called *real things;* from the latter only, representations *κατ' ἐξοχήν*. This view of the matter, which is the ordinary one, is known under the name of *Realism.* On the appearance of modern philosophy, *Idealism* opposed itself to this *Realism* and has since been steadily gaining ground. Malebranche and Berkeley were its earliest representatives, and Kant enhanced it to the power of Transcendental Idealism, by which the co-existence of the Empirical Reality of things with their Transcendental Ideality becomes conceivable, and according to which Kant expresses himself as follows:[1] "*Transcendental Idealism* teaches that all phenomena are representations only, not things by themselves." And again:[2]

---

[1] Compare Kant, "Krit. d. r. Vern." Elementarlehre. Abschnitt ii. Schlüsse a. d. Begr. *b* and *c*. 1st edition, pp. 33 and 34; 5th edition, p. 49. (Transl. M. Müller, p. 29, *b* and *c*.)

---

[1] Kant, "Krit. d. r. V." Kritik des Vierten Paralogismus der transcendentalen Psychologie, p. 369, 1st edition. (Engl. Transl. by M. Müller, p 320.)

[2] *Ibid.* 1st edition, pp. 374-375. Note. (Engl. Transl. p. 325. Note.)

"Space itself is nothing but mere representation, and whatever is in it must therefore be contained in that representation. There is nothing whatever in Space, except so far as it is really represented in it." Finally he says:[1] "If we take away the thinking Subject, the whole material world must vanish; because it is nothing but a phenomenon in the sensibility of our own subject and a certain class of its representations." In India, Idealism is even a doctrine of popular religion, not only of Brahminism, but of Buddhism; in Europe alone is it a paradox, in consequence of the essentially and unavoidably realistic principle of Judaism. But Realism quite overlooks the fact, that the so-called existence of these real things is *absolutely nothing but their being represented* (*ein Vorgestellt-werden*), or—if it be insisted, that only the immediate presence in the consciousness of the Subject can be called being represented *κατ' ἐντελέχειαν*—it is even only a possibility of being represented *κατὰ δύναμιν*. The realist forgets that the Object ceases to be Object apart from its reference to the Subject, and that if we take away that reference, or think it away, we at once do away with all objective existence. Leibnitz, while he clearly felt the Subject to be the necessary condition for the Object, was nevertheless unable to get rid of the thought that objects exist by themselves and independently of all reference whatsoever to the Subject, *i.e.* independently of being represented. He therefore assumed in the first place a world of objects exactly like the world of representations and running parallel with it, having no direct, but only an outward connection with it by means of a *harmonia præstabilita*;—obviously the most superfluous thing possible, for it never comes within perception, and the precisely similar world of representations which does come within perception, goes its own way regardless of it. When, however, he wanted to determine more closely the essence of these things existing objectively in themselves, he found himself obliged to declare the Objects in themselves to be Subjects (*monades*), and by doing so he furnished the most striking proof of the inability of our consciousness, in as far as it is merely cognitive, to find within the limits of the intellect—*i.e.* of the apparatus by means of which we represent the world—anything beyond Subject and Object; the representer and the represented. Therefore, if we abstract from the objectivity of an Object, or in other words, from its being represented (*Vorgestelltwerden*), if we annul it in its quality as an Object, yet still wish to retain something, we can meet with nothing but *the Subject*. Conversely, if we desire to abstract from the subjectivity of the Subject, yet to have something over, the contrary takes place, and this leads to Materialism.

---

[1] Kant, "Krit. d. r. V." "Betrachtung über die Summe," &c., p. 383 of 1st edition. (Engl. Transl. p. 331.)

Spinoza, who never thoroughly sifted the matter, and never therefore acquired a clear notion of it, nevertheless quite understood the necessary correlation between Subject and Object as so essential, that they are inconceivable without it; consequently he defined it as an identity in the Substance (which alone exists) of that which knows, with that which has extension.

OBSERVATION.—With reference to the chief argument of this paragraph, I take the opportunity to remark that if, in the course of this treatise, for the sake of brevity and in order to be more easily understood, I at any time use the term *real objects*, I mean by it nothing but the intuitive representations that are united to form the complex of empirical reality, which reality in itself always remains ideal.

§ 20. *Principle of Sufficient Reason of Becoming.*

In the Class of Objects for the Subject just described, the principle of sufficient reason figures as the *Law of Causality*, and, as such, I call it the *Principle of Sufficient Reason of Becoming*, *principium rationis sufficientis fiendi*. By it, all objects presenting themselves within the entire range of our representation are linked together, as far as the appearance and disappearance of their states is concerned, *i.e.* in the movement of the current of Time, to form the complex of empirical reality. The law of causality is as follows. When one or several real objects pass into any new state, some other state must have preceded this one, upon which the new state regularly follows, *i.e.* as often as that preceding one occurs. This sort of following we call *resulting;* the first of the states being named a *cause*, the second an *effect*. When a substance takes fire, for instance, this state of ignition must have been preceded by a state, 1°, of affinity to oxygen; 2°, of contact with oxygen; 3°, of a given temperature. Now, as ignition must necessarily follow immediately upon this state, and as it has only just taken place, that state cannot always have been there, but must, on the contrary, have only just supervened. This supervening is called a *change*. It is on this account that the law of causality stands in exclusive relation to *changes* and has to do with them alone. Every effect, at the time it takes place, is a *change* and, precisely by not having occurred sooner, infallibly indicates some other *change* by which it has been preceded. That other *change* takes the name of *cause*, when referred to the following one—of *effect*, when referred to a third necessarily preceding *change*. This is the chain of causality. It is necessarily without a beginning. By it, each supervening state must have resulted from a preceding change: in the case just mentioned, for instance, from the substance being brought into contact with free heat, from which necessarily resulted the heightened temperature; this contact again depended upon a preceding change, for instance the sun's rays falling upon a burning-glass; this again upon the removal of a cloud from before the sun; this upon the wind; the wind upon the unequal density of the atmosphere; this upon other conditions, and so forth *in infinitum*. When a state contains all the requisite conditions for bringing about a new state excepting *one*, *this one*, when at last it arrives, is, in a sense, rightly called the cause *κατ' ἐξοχήν*, inasmuch as we here have the final—in this case the decisive—change especially in view; but if we leave out this consideration, no single condition of the causal state has any advantage over the rest with reference to the determination of the causal connection in general, merely because it happens to be the last. Thus the removal of the cloud in the above example, is in so far the cause of the igniting, as it took place later than the direction of the burning-glass towards the object; but this might have taken place after the removal of the cloud and the addition of oxygen might have occurred later still: in this respect therefore it is the accidental order of things that determines which is the cause. On closer inspection, however, we find that it is *the entire state* which is the cause of the ensuing one, so that the chronological order in which its single conditions were brought about, is in all essential respects indifferent. With reference to a given case therefore, the last occurring condition of a state may be called the cause *κατ' ἐξοχήν*, because it completes the measure of the necessary conditions, and its appearance thus becomes the decisive change. For purposes of general consideration, however, it is only the *entire* state which, by bringing about its successor, can be regarded as the cause. The single requisites which, added together, complete and constitute the cause may be called causal elements (*ursächliche Momente*) or even *conditions*, and into these accordingly the cause may be subdivided. On the other hand, it is quite wrong to call the objects themselves causes, instead of the states: some would, for instance, call the burning-glass in the above example the cause of the ignition; while others, again, would call the cloud the cause; others the sun or the oxygen, and so on arbitrarily and without order. But it is absurd to call an object the cause of another object; first of all, because objects not only contain form and quality, but *Matter* also, which has neither beginning or end; secondly, because the law of causality refers exclusively to *changes*, *i.e.* to the entrance and exit of states in Time, wherein it regulates that special relation, in reference to which the earlier state is called *cause*, the later *effect*, and the necessary connection between both, the *resulting* of the one from the other.

I here refer the thoughtful reader to the explanations I have given in my chief work.[1] For it is of the highest importance that our conception of the true and proper meaning of the law of causality and the sphere of its validity should be perfectly clear and definite: before all things, that we should recognize, that this law refers solely and exclusively to *changes* of material states and to nothing else whatever; consequently, that it ought not to be brought in when *these* are not in question. The law of causality is the regulator of the *changes* undergone in Time by objects of our outer *experience;* but these objects are all material. Each change can only be brought about by another having preceded it, which is determined by a rule, and then the new change takes place as being necessarily induced by the preceding one. This necessity is the causal nexus.

However simple therefore the law of causality is, we nevertheless find it expressed quite differently in all philosophical manuals, from the earliest down to the latest ages: namely, in a broader, more abstract, therefore less definite way. We are, for instance, informed, now, that it is that by which something else comes into being; now, that it is what produces another thing or gives it reality,

---

[1] "Die Welt a. W. u. V." vol. ii. chap. 4, especially p. 42 and *seq.* of the 2nd edition; p. 46 *seq.* of the 3rd edition.

&c. &c. Wolf says: *Causa est principium, a quo existentia, sive actualitas, entis alterius dependet;* whereas it is obvious that in causality we have only to do with changes in the form of uncreated, indestructible Matter, and that a springing into existence of what did not previously exist is an impossibility. Want of clearness of thought may, no doubt, in most cases have led to these views of the causal relation; but surely sometimes an *arrière-pensée* lurks in the background—a theological intention coqueting with the Cosmological Proof, for whose sake it is ready to falsify even transcendental, *à priori* truths, the mother's milk of human understanding. We find the clearest instance of this in Thomas Brown's book, "On the Relation of Cause and Effect," a work of 460 pages, which, in 1835, had already reached its fourth edition, and has probably since gone through several more, and which, in spite of its wearisome, pedantic, rambling prolixity, does not handle the subject badly. Now this Englishman rightly recognises, that it is invariably with *changes* that the causal law has to do, and that every effect is accordingly a *change*. Yet, although it can hardly have escaped him, he is unwilling to admit that every cause is likewise a *change*, and that the whole process is therefore nothing but the uninterrupted nexus of *changes* succeeding one another in Time. On the contrary, he persists in clumsily calling the cause an *object* or *substance*, which precedes the change, and in tormenting himself throughout his tedious book with this entirely false expression, which spoils all his explanations, notwithstanding his own better knowledge and against his conscience, simply in order that his definition may on no account stand in the way of the Cosmological Proof, which others might hereafter state elsewhere. —But what can a truth be worth which needs devices such as these to prepare its way?

And what have our own worthy, honest German professors of philosophy been doing in behalf of their dearly beloved Cosmological Proof, since Kant dealt it the death-blow in his Critique of Pure Reason?—they, who prize truth above everything. They were, indeed, at their wits' ends, for—as these worthies well know, though they do not say so—*causa prima* is, just as well as *causa sui*, a *contradictio in adjecto*, albeit the former expression is more generally used than the latter. It is besides usually pronounced with a very serious, not to say solemn, air; nay, many people, especially English Reverends, turn up their eyes in a truly edifying way when they impressively and emphatically mention that *contradictio in adjecto*: 'the first cause.' They know that a first cause is just as inconceivable as the point at which Space ends or the moment when Time first began. For every cause is a *change*, which necessarily obliges us to ask for the preceding change that brought it about, and so on *in infinitum, in infinitum!* Even a first state of Matter, from which, as it has ceased to be, all following states could have proceeded, is inconceivable. For if this state had in itself been the cause of the following ones, they must likewise have existed from all eternity, and the actual state existing at the present moment could not have only just now come into being. If, on the other hand, that first state only began to be causal at some given period, something or other must have *changed* it, for its inactivity to have ceased; but then something must have occurred, some change must have taken place; and this again obliges us to ask for its cause—*i.e.* a change which preceded it; and here we are once more on the causal ladder, up which we are whipped step by step, higher and higher, *in infinitum, in infinitum!* (These gentlemen will surely not have the face to talk to me of Matter itself arising out of nothing! If so, they will find corollaries at their service further on.) The causal law therefore is not so accommodating as to let itself be used like a hired cab, which we dismiss when we have reached our destination; rather does it resemble the broom brought to life by the apprentice-wizard in Göthe's poem,[1] which, when once set in motion, does not leave off running and fetching water until the old master-wizard himself stops it, which he alone has the power to do. These gentlemen, however, have no master-wizards among them. So what did they do, these noble, genuine lovers of truth, ever on the alert, of course, to proclaim the advent of real merit to the world as soon as it shows itself in their profession, who far from wishing to divert attention from the works of those who are really what *they* only seem to be, by craftily ignoring and meanly keeping them dark, are naturally foremost to acknowledge their worth—aye, surely, as surely as folly loves wisdom above everything? What did they do, I say, to help their old friend, the sorely distressed Cosmological Proof, now at its last gasp? Oh, they hit upon a shrewd device. "Friend," they said, "you are in sorry plight since your fatal encounter with that stubborn old man in Königsberg, and indeed your brethren, the Ontological and Physico-theological Proofs are in no better condition. Never mind, you shall not be abandoned by us (that is what we are paid for, you know); only you must alter your dress and your name—there is no help for it—for if we call you by your right name, everyone will take to his heels. Now *incognito*, on the contrary, we can take you by the arm, and once more lead you into society; only, as we have just said, it must be *incognito!* That is sure to answer! First of all, your argument must henceforth be called *The Absolute*. This has a foreign, dignified, aristocratic ring; and no one knows better than we do all that can be done with Germans by assuming airs of importance. Of course all know what the real meaning is, and pique themselves upon that knowledge. But you yourself must come forward disguised, in the form of an enthymeme. Be sure and leave behind you all those prosyllogisms and premisses, by which you used to drag us wearily up the long climax, for everyone knows how utterly useless they are. Come forward with a bold face and a self-sufficient, supercilious air, like a man of few words, and at one bound you will reach the goal. Exclaim (and we will chime in), '*The Absolute*, confound it! *that* must *exist*, or there would be nothing at all!' Here, strike the table with your fist. Whence does the Absolute come? 'What a silly question! Did not I tell you it was the Absolute?'—That will do, forsooth! That will do! Germans are accustomed to content themselves with words instead of thoughts. Do we not train them to it from their cradle? Only look at Hegelianism! What is it but empty, hollow, nauseous twaddle! Yet how brilliant a career was that of this philosophical time-server! A few mercenary individuals had only to strike up a laudation of this stuff, and they at once found an echo to their voices in the empty hollow of a thousand numskulls—an echo which still continues to resound, and to extend—and behold! an ordinary intellect, a common impostor soon became a sublime thinker. Take heart, therefore! Besides, our friend and patron, we will also second you in other ways, for how, indeed, are we to get a living without you? So that carping old faultfinder, Kant, has been criticizing Reason, and clipping her wings, has he? Well, then, we will invent a *new* sort of Reason, such as has never been heard of—a Reason that does not think, but which has direct intuition—a Reason which sees Ideas (a high-flown word, made to mystify), sees them bodily; or which apprehends directly that which you and others seek to prove; or, again, a Reason which has forebodings of all this—this last for the benefit of those who do not care to make large concessions, but also are satisfied with very little. Let us thus pass off early inculcated, popular conceptions for direct revelations of this new kind of Reason, *i.e.* for inspirations from above. As for that old-fashioned Reason, which criticism has criticized away, let us degrade it, call it Understanding, and send it about its business. Well, and what is to become of real, true Understanding?—What in the world have we to do with real, true Understanding?—You smile incredulously; but we know our listeners, and the *harum, horum* we see on the students' benches before us. Bacon of Verulam already in his time said: 'Young men learn to believe at Universities.' Of this they can learn as much as they wish from us; we have a good stock of articles of faith on hand. Should any misgivings assail you, remember that we are in Germany, where what would have been impossible in any other country, has been found possible: where a dull-witted, ignorant, pseudo-philosopher, whose ineffably hollow verbiage disorganizes peoples' brains completely and permanently, a scribbler of nonsense—I am speaking of our dearly beloved Hegel—has not only been actually proclaimed a profound thinker with impunity, and even without incurring ridicule, but is readily accepted as such: yes, indeed, for this fiction has found credence for the last thirty years, and is believed to this day!—Once therefore we have this Absolute with your help, we are quite safe, in spite of Kant and his Critique.—We may then philosophise in a lofty tone, making the Universe proceed from *the Absolute* by means of the most heterogeneous deductions, one more tiresome than the other—this, by the way, being their only point of resemblance. We can call the world the Finite, and the Absolute the Infinite—thus giving an agreeable variety to our nonsense—and talk of nothing but God, explaining how, why, wherefore, by what voluntary or involuntary process he created or brought forth the world, showing whether he be within or without it, and so forth, as if Philosophy were Theology, and as if it sought for enlightenment concerning God, not concerning the Universe!"

---

[1] Göthe, "Der Zauberlehrling."

The Cosmological Proof, with which we here have to do, and to which the above apostrophe is addressed, consists thus, properly speaking, in the assertion, that the principle of the sufficient reason of *becoming*, or the law of causality, necessarily leads to a thought which destroys it and declares it to be null and void. For the *causa prima* (*absolutum*) can only be reached by proceeding upwards from consequence to reason, through a series prolonged *ad libitum;* but it is impossible to stop short at the *causa prima* without at once annulling the principle of sufficient reason.

Having thus briefly and clearly shown the nullity of the Cosmological Proof, as I had in my second chapter already shown the nullity of the Ontological Proof, the sympathizing reader may perhaps expect me to do the same with respect to the Physico-theological Proof, which is a great deal more plausible. As, however, this belongs by its nature to a different department of philosophy, it would be quite out of place here. I therefore refer him to Kant's Critique of Pure Reason, as well as to his Critique of the Faculty of Judgment, where he treats this subject *ex professo;* I likewise refer him, as a complement to Kant's purely negative procedure, to my own positive one in "The Will in Nature,"[1] a work which, though small in bulk, is rich and weighty in content. As for the indifferent reader, he is free to let this and indeed all my writings pass down unread to his descendants. It matters not to me; for I am here, not for one generation only, but for many.

Now, as the law of causality is known to us *à priori*, and is therefore a transcendental law, applicable to every possible experience and consequently without exception, as will be shown in § 21; as moreover it decides, that upon a given, definite, relatively first state, a second equally definite one inevitably ensues by rule, *i.e.*, always; the relation between cause and effect is a necessary one, so that the causal law authorizes us to form hypothetical judgments, and thereby shows itself to be a form of the principle of sufficient reason, upon which principle all judgments must be founded and, as will be shown further on, all *necessity* is based.

---

[1] The translation of which follows the Fourfold Root in the present volume.

This form of our principle I call the *principle of the sufficient reason of becoming,* because its application invariably pre-supposes a change, the entering upon a new state: consequently a becoming. One of its essential characteristics is this: that the cause always precedes the effect in Time (compare § 47), and this alone gives us the original criterion by which to distinguish which is cause and which effect, of two states linked together by the causal nexus. Conversely, in some cases, the causal nexus is known to us through former experience; but the rapidity with which the different states follow upon each other is so great, that the order in which this happens escapes our perception. We then conclude with complete certitude from causality to succession: thus, for instance, we infer that the igniting of gunpowder precedes its explosion.[1]

From this essential connection between causality and succession it follows, that the conception of reciprocity, strictly speaking, has no meaning; for it presumes the effect to be again the cause of its cause: that is, that what follows is at the same time what precedes. In a "Critique of Kantian Philosophy," which I have added to my chief work, and to which I refer my readers,[2] I have shown at length that this favourite conception is inadmissible. It may be remarked, that authors usually have recourse to it just when their insight is becoming less clear, and this accounts for the frequency of its use. Nay, it is precisely when a writer comes to the end of his conceptions, that the word '*reciprocity*' presents itself more readily than any other; it may, in fact, be looked upon as a kind of alarm-gun, denoting that the author has got out of his depth. It is also worthy of remark, that the word *Wechselwirkung*, literally reciprocal action—or, as we have preferred translating it, *reciprocity*—is only found in the German language, and that there is no precise equivalent for it in daily use in any other tongue.

---

[1] Here I refer my readers to "Die Welt als Wille und Vorstellung," vol. ii. chap. 4, p. 41 of the 2nd edition, and p. 45 of the 3rd edition.

[2] "Die Welt a. W. u. V." vol. i. pp. 517-521 of the 2nd edition, and pp. 544-549 of the 3rd edition.

From the law of causality spring two corollaries which, in virtue of this origin, are accredited as cognitions *à priori*, therefore as unquestionable and without exception. They are, *the law of inertia* and that *of permanence of substance*. The first of these laws avers, that every state in which a body can possibly be—consequently that of repose as well as that of any kind of movement—must last for ever without change, diminution, or augmentation, unless some cause supervenes to alter or annul it. But the other law, by which the eternity of Matter is affirmed, results from the fact, that the law of causality is exclusively applicable to *states* of bodies, such as repose, movement, form, and quality, since it presides over their temporal passing in or out of being; but that it is by no means applicable to the existence of *that which endures* these states, and is called *Substance*, in order precisely to express its exemption from all arising and perishing. '*Substance is permanent*' means, that it can neither pass into, nor out of being: so that its quantity existing in the universe can neither be increased nor diminished. That we know this *à priori*, is proved by the consciousness of unassailable certainty with which, when we see a body disappear—whether it be by conjuring, by minute subdivision, by combustion, volatilisation, or indeed any process whatever—we all nevertheless firmly assume that its substance, *i.e.* its *matter*, must still exist somewhere or other in undiminished quantity, whatever may have become of its *form*; likewise, when we perceive a body suddenly in a place where it was not before, that it must have been brought there or formed by some combination of invisible particles—for instance, by precipitation—but that it, *i.e.* its substance, cannot have then started into existence; for this implies a total impossibility and is utterly inconceivable. The certainty with which we assume this beforehand (*à priori*), proceeds from the fact, that our Understanding possesses absolutely no form under which to conceive the beginning and end of Matter. For, as before said, the law of causality—the only form in which we are able to conceive changes at all—is solely applicable to *states* of bodies, and never under any circumstances to the existence of *that which undergoes* all changes: *Matter*. This is why I place the principle of the permanence of Matter among the corollaries of the causal law. Moreover, we cannot have acquired *à posteriori* the conviction that substance is permanent, partly because it cannot, in most instances, be empirically established; partly also, because every empirical knowledge obtained exclusively by means of induction, has only approximate, consequently precarious, never unconditioned, certainty. The firmness of our persuasion as to this principle is therefore of a different kind and nature from our security of conviction with regard to the accuracy of any *empirically* discovered law of Nature, since it has an entirely different, perfectly unshakable, never vacillating firmness. The reason of this is, that the principle expresses a *transcendental* knowledge, *i.e.* one which determines and fixes, *prior* to all experience, what is in any way possible within the whole range of experience; but, precisely by this, it reduces the world of experience to a mere cerebral phenomenon. Even the most universal among the non-transcendental laws of Nature and the one least liable to exception—the law of gravitation—is of empirical origin, consequently without guarantee as to its absolute universality; wherefore it is still from time to time called in question, and doubts occasionally arise as to its validity beyond our solar system; and astronomers carefully call attention to any indications corroborative of its doubtfulness with which they may happen to meet, thereby showing that they regard it as merely empirical. The question may of course be raised, whether gravitation takes effect between bodies which are separated by an *absolute* vacuum, or whether its action within a solar system may not be mediated by some sort of ether, and may not cease altogether between fixed stars; but these questions only admit of an empirical solution, and this proves that here we have not to do with a knowledge *à priori*. If, on the other hand, we admit with Kant and Laplace the hypothesis, as the most probable one, that each solar system has developed out of an original *nebula* by a gradual process of condensation, we still cannot for a moment conceive the possibility of that original substance having sprung into being out of *nothing:* we are forced to assume the anterior existence of its particles somewhere or other, as well as their having been brought together somehow or other, precisely because of the transcendental nature of the principle of the permanence of Substance. In my Critique of Kantian Philosophy,[1] I have shown at length, that *Substance* is but another word for *Matter*, the conception of substance not being realisable excepting in *Matter*, and therefore deriving its origin from *Matter*, and I have also specially pointed out how that conception was formed solely to serve a surreptitious purpose. Like many other equally certain truths, this eternity of Matter (called the permanence of substance) is forbidden fruit for professors of philosophy; so they slip past it with a bashful, sidelong glance.

---

[1] "Die Welt a. W. u. V." vol. i. p. 550 of 2nd, and 580 of 3rd edition.

By the endless chain of causes and effects which directs all *changes* but never extends beyond them, two existing things remain untouched, precisely because of the limited range of its action: on the one hand, *Matter*, as we have just shown; on the other hand, the primary *forces of Nature.* The first (matter) remains uninfluenced by the causal nexus, because it is *that which undergoes* all changes, or *on which* they take place; the second (the primary forces), because it is they alone *by which* changes or effects become possible; for they alone give causality to causes, *i.e.* the faculty of operating, which the causes therefore hold as mere vassals a fief. Cause and effect are *changes* connected together to necessary succession in Time; whereas the forces of Nature by means of which all causes operate, are exempt from all change; in this sense therefore they are outside Time, but precisely on that account they are always and everywhere in reserve, omnipresent and inexhaustible, ever ready to manifest themselves, as soon as an opportunity presents itself in the thread of causality. A *cause,* like its *effect,* is invariably something individual, a single change; whereas a force of Nature is something universal, unchangeable, present at all times and in all places. The attraction of a thread by amber, for instance, at the present moment, is an effect; its cause is the preceding friction and actual contact of the amber with the thread; and the *force of Nature* which acts in, and presides over, the process, is Electricity. The explanation of this matter is to be found in my chief work,[1] and there I have shown in a long chain of causes and effects how the most heterogeneous natural forces successively come into play in them. By this explanation the difference between transitory phenomena and permanent forms of operation, becomes exceedingly clear; and as, moreover, a whole section (§ 26) is devoted to the question, it will be sufficient here to give a brief sketch of it. The *rule*, by which a force of Nature manifests itself in the chain of causes and effects—consequently the link which connects it with them—is the law of Nature. But the confusion between forces of Nature and causes is as frequent as it is detrimental to clearness of thought. It seems indeed as though no one had accurately defined the difference between these conceptions before me, however great may have been the urgency for such a distinction. Not only are forces of Nature turned into causes by such expressions as, 'Electricity, Gravity, &c., are the *cause* of so-and-so,' but they are even often turned into effects by those who search for a cause for Electricity, Gravity, &c. &c., which is absurd. Diminishing the number of the forces of Nature, however, by reducing one to another, as for instance Magnetism is in our days reduced to Electricity, is a totally different thing. Every *true*, consequently really primary force of Nature—and every fundamental chemical property belongs to these forces—is essentially a *qualitas occulta, i.e.* it does not admit of physical, but only of metaphysical explanation: in other words, of an explanation which transcends the world of phenomena. No one has carried this confusion, or rather identification, of causes with forces of Nature further than Maine de Biran in his "Nouvelles considérations des rapports du physique au moral," for it is essential to his philosophy. It is besides remarkable, that when he speaks of causes, he rarely uses the word *cause* alone, but almost always speaks of *cause ou force*, just as we have seen Spinoza above (§ 8) write *ratio sive causa* no less than eight times in the same page. Both writers are evidently conscious that they are identifying two disparates, in order to be able to make use of the one or the other, according to circumstances; for this end they are obliged to keep the identification constantly before their readers' mind.—

---

[1] See "Die Welt a. W. u. V." vol. i. § 26, p. 153 of the 2nd, and p. 160 of the 3rd edition.

Now Causality, as the director of each and every change, presents itself in Nature under *three* distinct forms: as *causes* in the strictest acceptation of the word, as *stimuli*, and as *motives*. It is just upon this difference that the real, essential distinction between inorganic bodies, plants, and animals is based, and not upon external, anatomical, let alone chemical, distinctions.

cf. p.17

A *cause*, in its narrowest sense, is that upon which changes in the *inorganic* kingdom alone ensue: those changes, that is to say, which form the theme of Mechanics, Physics, and Chemistry. Newton's third fundamental law, "Action and reaction are equal to one another," applies exclusively to this cause, and enunciates, that the state which precedes (the cause) undergoes a change equivalent to that produced by it (the effect). In this form of causality alone, moreover, does the degree of the effect always exactly correspond to the degree of the cause, so as to enable us accurately to calculate the one by means of the other.

The second form of causality is the *stimulus;* it reigns over *organic* life, as such, *i.e.* over plant life and the vegetative, that is, the unconscious, part of animal life. This second form is characterized by the absence of the distinctive signs of the first. In it accordingly action and reaction are not equal, nor does the intensity of the effect by any means correspond throughout all its degrees to the intensity of the cause; in fact, the opposite effect may even be produced by intensifying the cause.

The third form of causality is the *motive*. Under this form causality rules animal life proper: that is, the exterior, consciously performed actions of all animals. The medium for motives is *knowledge:* an intellect is accordingly needed for susceptibility to motives. The true characteristic of the animal is therefore the faculty of knowing, of representing (*Das Vorstellen*). Animals, as such, always move towards some aim and end, which therefore must have been *recognised* by them: that is to say, it must have presented itself to them as something different from themselves, yet of which they are conscious. Therefore the proper definition of the animal would be: 'That which knows;' for no other definition quite hits the mark or can even perhaps stand the test of investigation. Movement induced by motives is necessarily wanting where there is no cognitive faculty, and movement by stimuli alone remains, *i.e.* plant life. Irritability and sensibility are therefore inseparable. Still motives evidently act in a different way from stimuli; for the action of the former may be very brief, nay, need only be momentary; since their efficacy, unlike that of stimuli, stands in no relation whatever to the duration of that action, to the proximity of the object, &c. &c. A motive needs but to be perceived therefore, to take effect; whereas stimuli always require outward, often even inward, contact and invariably a certain length of time.

This short sketch of the three forms of causality will suffice here. They are more fully described in my Prize-essay on Free Will.[1] One thing, however, still remains to be urged. The difference between cause, stimulus, and motive, is obviously only a consequence of the various degrees of *receptivity* of beings; the greater their receptivity, the feebler may be the nature of the influence: a stone needs an impact, while man obeys a look. Nevertheless, both are moved by a sufficient cause, therefore with the

Man & a rock

---

[1] See "Die beiden Grundprobleme der Ethik," p. 30-34.

same necessity. For 'motivation'[1] is only causality passing through knowledge; the intellect is the medium of the motives, because it is the highest degree of receptivity. By this, however, the law of causality loses nothing whatever of its rigour and certainty; for motives are causes and operate with the same necessity which all causes bring with them. This necessity is easy to perceive in animals because of the greater simplicity of their intellect, which is limited to the perception of what is present. Man's intellect is double: for not only has he intuitive, but abstract, knowledge, which last is not limited to what is present. Man possesses Reason; he therefore has a power of elective decision with clear consciousness: that is, he is able to weigh against one another motives which exclude each other, as such; in other terms, he can let them try their strength on his will. The most powerful motive then decides him, and his actions ensue with just the same necessity as the rolling of a ball after it has been struck. Freedom of Will[2] means (not professorial twaddle but) "*that a given human being, in a given situation, can act in two different ways.*" But the utter absurdity of this assertion is a truth as certain and as clearly proved, as any truth can be which passes the limits of pure mathematics. In my Essay on Free Will, to which the Norwegian Society awarded the prize, this truth is demonstrated more clearly, methodically, and thoroughly than has been done before by anyone else, and this moreover with special reference to those facts of our consciousness by which ignorant people imagine that absurdity to be confirmed. In all that is essential however, Hobbes, Spinoza, Priestley, Voltaire,

a

---

[1] The word "motivation," though it may appear objectionable to the English reader, seemed unavoidable here, as being Schopenhauer's own term, for which there is no adequate equivalent in general use in our language. [Translator's note.]

[2] Here used in the absolute sense of *liberum arbitrium indifferentiæ*. [Tr.]

and even Kant[1] already taught the same doctrine. Our professional philosophers, of course, do not let this interfere with their holding forth on Free Will, as if it were an understood thing which had never been questioned. But what do these gentlemen imagine the above-named great men to have come into the world for, by the grace of Nature? To enable them (the professors) to earn their livelihood by philosophy?—Since I had proved this truth in my prize-essay more clearly than had ever been done before, and since moreover a Royal Society had sanctioned that proof by placing my essay among its memoranda, it surely behoved these worthies, considering the views they held, to make a vigorous attack upon so pernicious a doctrine, so detestable a heresy, and thoroughly to refute it. Nay, this duty was all the more imperative as, in my other essay "On the Foundation of Morality,"[1] I had proved the utter groundlessness of Kant's practical Reason with its Categorical Imperative which, under the name of the Moral Law, is still used by these gentlemen as the corner-stone of their own shallow systems of morality. I have shown it to be a futile assumption so clearly and irrefutably, that no one with a spark of judgment can possibly believe any longer in this fiction.—"Well, and so they probably did."—Oh no! They take good care not to venture on such slippery ground! Their ability consists in holding their tongues; silence is all they have to oppose to intelligence, earnestness, and truth. In not one of the products of their useless scribblings that have appeared since 1841, has the slightest notice been taken of my Ethics—undoubtedly the most important work on Moral Philosophy that has been published for the last sixty years—nay, their terror of me and of my truth is so great, that none of the literary journals issued by Academies or Universities has so much as mentioned the book. *Zitto, zitto,* lest the public should perceive anything: in this consists the whole of their policy. The instinct of self-preservation may, no doubt, be at the bottom of these artful tactics. For would not a philosophy, whose sole aim was truth, and which had no other consideration in view, be likely to play the part of the iron pot among the earthen ones, were it to come in contact with the petty systems composed under the influence of a thousand personal considerations by people whose chief qualification is the propriety of their sentiments? Their wretched fear of my writings is the fear of truth. Nor can it be denied, that precisely this very doctrine of the complete necessity of all acts of the will stands in flagrant contradiction with all the hypotheses of their favourite old-woman's philosophy cut after the pattern of Judaism. Still, that severely tested truth, far from being disturbed by all this, as a sure datum and criterion, as a true δός μοι ποῦ στῶ, proves the futility of all that old-woman's philosophy and the urgent need of a fundamentally different, incomparably deeper view of the Universe and of Man;—no matter whether that view be compatible with the official duties of a professional philosopher or not.

---

[1] "Whatever conception one may form of freedom of the will, for metaphysical purposes, its phenomena, human actions, are nevertheless determined by universal laws of Nature, just as well as every other occurrence in Nature." "Ideen zu einer allgemeinen Geschichte." Anfang. I. Kant. "All the acts of a man, so far as they are phenomena, are determined from his empirical character and from the other concomitant causes, according to the order of Nature; and if we could investigate all the manifestations of his will to the very bottom, there would be not a single human action which we could not predict with certainty and recognize from its preceding conditions as necessary. There is no freedom therefore with reference to this empirical character, and yet it is only with reference to it that we can consider man, when we are merely *observing*, and, as is the case in anthropology, trying to investigate the motive causes of his actions physiologically."—"Kritik. d. r. Vern." p. 549 of the 1st edition, and p. 577 of the 5th edition. (Engl. Transl by M. Müller, p. 474.)

"It may therefore be taken for granted, that if we could see far enough into a man's mode of thinking, as it manifests itself in his inner, as well as outer actions, for us to know every, even the faintest motive, and in like manner all the other causes which act upon these, it would be possible to calculate his conduct in future with the same certainty as an eclipse of the sun or moon."—"Kritik. der praktischen Vernunft" ed. Rosenkranz, p. 230 and p. 177 of the 4th edition.

---

[1] Published in the same volume with the Prize-Essay on "Free Will." See "Die beiden Grundprobleme der Ethik."

§ 21. À priori *character of the conception of Causality. Intellectual Character of Empirical Perception.*

THE UNDERSTANDING.

In the professorial philosophy of our philosophy-professors we are still taught to this day, that perception of the outer world is a thing of the senses, and then there follows a long dissertation upon each of the five senses: whereas no mention whatever is made of the intellectual character of perception: that is to say, of the fact, that it is mainly the work of the Understanding, which, by means of its own peculiar form of Causality, together with the forms of pure sensibility, Time and Space, which are postulated by Causality, primarily creates and produces the objective, outer world out of the raw material of a few sensations. And yet in its principal features, I had stated this matter in the first edition of the present treatise[1] and soon after developed it more fully in my treatise "On Vision and Colours" (1816), of which Professor Rosas has shown his appreciation by allowing it to lead him into plagiarism.[2] But our professors of philosophy have not thought fit to take the slightest notice either of this, or indeed of any of the other great and important truths which it has been the aim and labour of my whole life to set forth, in order to secure them as a lasting possession to mankind. It does not suit their tastes, or fit into their notions; it leads to no Theology, nor is it even adapted to drill students for higher State purposes. In short, professional philosophers do not care to learn from me, nor do they even see how much they might learn from me: that is, all that their children and their children's children will learn from me. They prefer to sit down and spin a long metaphysical yarn, each out of his own thoughts, for the benefit of the public; and no doubt, if fingers are a sufficient qualification, they have it. How right was Macchiavelli when he said, as Hesiod[1] before him: "There are three sorts of heads: firstly, those which acquire knowledge of things and comprehend them by themselves; secondly, those which recognise the truth when it is shown them by others; and thirdly, those which can do neither the one nor the other."[2]—

---

[1] Anno 1813, pp. 53-55.

[2] For further details see my "Will in Nature," p. 19 of the 1st edition, and p. 14 of the 3rd. (P. 230 *et seqq.* of the translation of the "Will in Nature," which follows the "Fourfold Root" in the present volume.)

One must indeed be forsaken by all the gods, to imagine that the outer, perceptible world, filling Space in its three dimensions and moving on in the inexorable flow of Time, governed at every step by the laws of Causality, which is without exception, and in all this merely obeying laws we can indicate before all experience of them—that such a world as this, we say, can have a real, objective existence outside us, without any agency of our own, and that it can then have found its way into our heads through bare sensation and thus have a second existence within us like the one outside. For what a miserably poor thing is mere sensation, after all! Even in the noblest of our organs it is nothing but a local, specific feeling, susceptible of some slight variation, still in itself always subjective and, as such therefore, incapable of containing anything objective, anything like perception. For sensation is and remains a process within the organism and is limited, as such, to the region within the skin; it cannot therefore contain anything which lies beyond that region, or, in other words, anything that is outside us. A sensation may be pleasant or unpleasant—which betokens a relation to the Will—but nothing objective can ever lie in any sensation. In the organs of the senses, sensation is heightened by the confluence of the nerve-extremities, and can easily be excited from without on account of their extensive distribution and the delicacy of the envelope which encloses them; it is besides specially susceptible to particular influences, such as light, sound, smell; notwithstanding which it is and remains mere sensation, like all others within our body, consequently something essentially subjective, of whose changes we only become immediately conscious in the form of the *inner* sense, Time: that is, successively. It is only when the *Understanding* begins to act—a function, not of single, delicate nerve-extremities, but of that mysterious, complicated structure weighing from five to ten pounds, called the brain—only when it begins to apply its sole form, *the causal law*, that a powerful transformation takes place, by which subjective sensation becomes objective perception. For, in virtue of its own peculiar form, therefore *à priori*, *i.e. before* all experience (since there could have been none till then), the Understanding conceives the given corporeal sensation as an *effect* (a word which the Understanding alone comprehends), which effect, as such, necessarily implies a *cause*. Simultaneously it summons to its assistance *Space*, the form of the *outer* sense, lying likewise ready in the intellect (*i.e.* the brain), in order to remove that cause *beyond* the organism; for it is by this that the external world first arises, Space alone rendering it possible, so that pure intuition *à priori* has to supply the foundation for empirical perception. In this process, as I shall soon show more clearly, the Understanding avails itself of all the several data, even the minutest, which are presented to it by the given sensation, in order to construct the cause of it in Space in conformity with them. This intellectual operation (which is moreover explicitly denied both by Schelling[1] and by Fries[2]), does not however take place discursively or reflectively, *in abstracto*, by means of conceptions and words; it is, on the contrary, an intuitive and quite direct process. For by it alone, therefore exclusively *in* the Understanding and *for* the Understanding, does the real, objective, corporeal world, filling Space in its three dimensions, present itself and further proceed, according to the same law of causality, to change in Time, and to move in Space.—It is therefore the Understanding itself which has to create the objective world; for this world cannot walk into our brain from outside all ready cut and dried through the senses and the openings of their organs. In fact, the senses supply nothing but the raw materials which the Understanding at once proceeds to work up into the objective view of a corporeal world, subject to regular laws, by means of the simple forms we have indicated: Space, Time, and Causality. Accordingly our every-day *empirical perception* is an *intellectual* one and has a right to claim this predicate, which German pseudo-philosophers have given to a pretended intuition of dream-worlds, in which their beloved *Absolute* is supposed to perform its evolutions. And now I will proceed to show how wide is the gulf which separates sensation from perception, by pointing out how raw is the material out of which the beautiful edifice is constructed.

---

[1] Hesiod, ἔργα, 293.

[2] Macchiavelli, "Il principe," cap. 22.

---

[1] Schelling, "Philosophische Schriften" (1809), vol. i. pp. 237 and 238.

[2] Fries, "Kritik der Vernunft." vol. i. pp. 52-56 and p. 290 of the 1st edition.

Objective perception makes use, properly speaking, of only two senses; touch and sight. These alone supply the data upon which, as its basis, the Understanding constructs the objective world by the process just described. The three other senses remain on the whole subjective; for their sensations, while pointing to an external cause, still contain no data by which its relations *in Space* can be determined. Now *Space* is the form of all perception, *i.e.* of *that* apprehension, in which alone *objects* can, properly speaking, present themselves. Therefore those other three senses can no doubt serve to announce the presence of objects we already know in some other way; but no construction in Space, consequently no objective perception, can possibly be founded on their data. A rose cannot be constructed from its perfume, and a blind man may hear music all his life without having the slightest objective representation either of the musicians, or of the instruments, or of the vibrations of the air. On the other hand, the sense of hearing is of great value as a medium for language, and through this it is the sense of *Reason*. It is also valuable as a medium for music, which is the only way in which we comprehend numerical relations not only *in abstracto*, but directly, *in concreto*. A musical sound or tone, however, gives no clue to spacial relations, therefore it never helps to bring the nature of its cause nearer to us; we stop short at it, so that it is no datum for the Understanding in its construction of the objective world. The sensations of touch and sight alone are such data; therefore a blind man without either hands or feet, while able to construct Space for himself *à priori* in all its regularity, would nevertheless acquire but a very vague representation of the objective world. Yet what is supplied by touch and sight is not by any means perception, but merely the raw material for it. For perception is so far from being contained in the sensations of touch and sight, that these sensations have not even the faintest resemblance to the qualities of the things which present themselves to us through them, as I shall presently show. Only what really belongs to sensation must first be clearly distinguished from what is added to it by the intellect in perception. In the beginning this is not easy, because we are so accustomed to pass from the sensation at once to its cause, that the cause presents itself to us without our noticing the sensation apart from it, by which, as it were, the premisses are supplied to this conclusion drawn by the Understanding.

Thus touch and sight have each their own special advantages, to begin with; therefore they assist each other mutually. Sight needs no contact, nor even proximity; its field is unbounded and extends to the stars. It is moreover sensitive to the most delicate degrees of light, shade, colour, and transparency; so that it supplies the Understanding with a quantity of nicely defined data, out of which, by dint of practice, it becomes able to construct the shape, size, distance, and nature of bodies, and represents them at once perceptibly. On the other hand, touch certainly depends upon contact; still its data are so varied and so trustworthy, that it is the most searching of all the senses. Even perception by sight may, in the last resort, be referred to touch; nay, sight may be looked upon as an imperfect touch extending to a great distance, which uses the rays of light as long feelers; and it is just because it is limited to those qualities which have light for their medium and is therefore one-sided, that it is so liable to deception; whereas touch supplies the data for cognising size, shape, hardness, softness, roughness, temperature, &c. &c., quite immediately. In this it is assisted, partly by the shape and mobility of our arms, hands, and fingers, from whose position in feeling objects the Understanding derives its data for constructing bodies in Space, partly by muscular power, which enables it to know the weight, solidity, toughness, or brittleness of bodies: all this with the least possible liability to error.

These data nevertheless do not by any means yet give perception, which is always the work of the Understanding, The sensation I have in pressing against a table with my hand, contains no representation of a firm cohesion of parts in that object, nor indeed anything at all like it. It is only when my Understanding passes from that sensation to its cause, that the intellect constructs for itself a body having the properties of solidity, impenetrability, and hardness. If in the dark, I put my hand upon a flat surface, or lay hold of a ball of about three inches in diameter, the same parts of my hand feel the pressure in both cases; it is only by the different position which my hand takes that, in the one or in the other case, my Understanding constructs the shape of the body whose contact is the cause of the sensation, for which it receives confirmation from the changes of position which I make. The sensations in the hand of a man born blind, on feeling an object of cubic shape, are quite uniform and the same on all sides and in every direction: the edges, it is true, press upon a smaller portion of his hand, still nothing at all like a cube is contained in these sensations. His Understanding, however, draws the immediate and intuitive conclusion from the resistance felt, that this resistance must have a cause, which then presents itself through that conclusion as a hard body; and through the movements of his arms in feeling the object, while the hand's sensation remains unaltered, he constructs the cubic shape in Space, which is known to him *à priori*. If the representation of a cause and of Space, together with their laws, had not already existed within him, the image of a cube could never have proceeded from those successive sensations in his hand. If a rope be drawn through his hand, he will construct, as the cause of the friction he feels and of its duration, a long cylindrical body, moving uniformly in the same direction in that particular position of his hand. But the representation of movement, *i.e.* of change of place in Space by means of Time, never could arise for him out of the mere sensation in his hand; for that sensation can neither contain, nor can it ever by itself alone produce any such thing. It is his intellect which must, on the contrary, contain within itself, before all experience, the intuitions of Space, Time, and together with them that of the possibility of movement; and it must also contain the representation of Causality, in order to pass from sensation—which alone is given by experience—to a cause of that sensation, and to construct that cause as a body having this or that shape, moving in this or that direction. For how great is the difference between a mere sensation in my hand and the representations of causality, materiality, and mobility in Space by means of Time! The sensation in my hand, even if its position and its points of contact are altered, is a thing far too uniform and far too poor in data, to enable me to construct out of it the representation of Space, with its three dimensions, and of the influences of bodies one upon another, together with the properties of expansion, impenetrability, cohesion, shape, hardness, softness, rest, and motion: the basis, in short, of the objective world. This is, on the contrary, only possible by the intellect containing within itself, anterior to all experience, Space, as the form of perception; Time, as the form of change; and the law of Causality, as the regulator of the passing in and out of changes. Now it is precisely the pre-existence before all experience of all these forms, which constitutes the Intellect. Physiologically, it is a function of the brain, which the brain no more learns by experience than the stomach to digest, or the liver to secrete bile. Besides, no other explanation can be given of the fact, that many who were born

✓

blind, acquire a sufficiently complete knowledge of the relations of Space, to enable them to replace their want of eyesight by it to a considerable degree, and to perform astonishing feats. A hundred years ago Saunderson, for instance, who was blind from his birth, lectured on Optics, Mathematics, and Astronomy at Cambridge.[1] This, too, is the only way to explain the exactly opposite case of Eva Lauk, who was born without arms or legs, yet acquired an accurate perception of the outer world by means of sight alone as rapidly as other children.[2] All this therefore proves that Time, Space, and Causality are not conveyed into us by touch or by sight, or indeed at all from outside, but that they have an internal, consequently not empirical, but intellectual origin. From this again follows, that the perception of the bodily world is an essentially intellectual process, a work of the Understanding, to which sensation merely gives the opportunity and the data for application in individual cases.

I shall now prove the same with regard to the sense of sight. Here the only immediate datum is the sensation experienced by the retina, which, though admitting of great variety, may still be reduced to the impression of light and dark with their intermediate gradations and to that of colours proper. This sensation is entirely subjective: that is to say, it only exists within the organism and under the skin. Without the Understanding, indeed, we should never even become conscious of these gradations, excepting as of peculiar, varied modifications of the feeling in our eye, which would bear no resemblance to the shape, situation, proximity, or distance of objects outside us. For *sensation*, in seeing, supplies nothing more than a varied affection of the retina, exactly like the spectacle of a painter's palette with divers splashes of colour. Nor would anything more remain over in our consciousness, were we suddenly deprived of all our Understanding—let us say by paralysis of the brain—at a moment when we were contemplating a rich and extensive landscape, while the sensation was left unchanged: for this was the raw material out of which our Understanding had just before been constructing that perception.

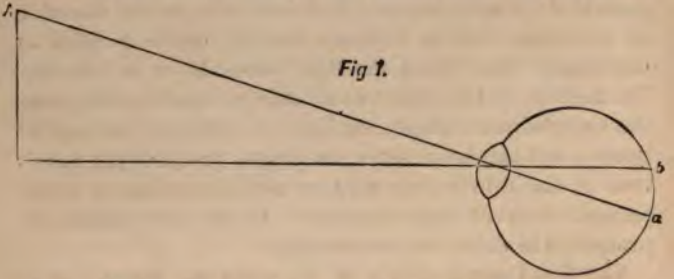
---

[1] Diderot, in his "Lettre sur les Aveugles," gives a detailed account of Saunderson.

[2] See "Die Welt a. W. u. V." vol. ii. chap. 4.

Now, that the Understanding should thus be able, from such limited material as light, shade and colour, to produce the visible world, inexhaustibly rich in all its different shapes, by means of the simple function of referring effects to causes assisted by the intuition of Space, depends before all things upon the assistance given by the sensation itself, which consists in this: first, that the retina, as a surface, admits of a juxtaposition of impressions; secondly, that light always acts in straight lines, and that its refraction in the eye itself is rectilinear; finally, that the retina possesses the faculty of immediately feeling from which direction the light comes that impinges upon it, and this can, perhaps, only be accounted for by the rays of light penetrating below the surface of the retina. But by this we gain, that the mere impression at once indicates the direction of its cause; that is, it points directly to the position of the object from which the light proceeds or is reflected. The passage to this object as a cause no doubt presupposes the knowledge of causal relations, as well as of the laws of Space; but this knowledge constitutes precisely the furniture of the *Intellect*, which, here also, has again to create perception out of mere sensation. Let us now examine its procedure in doing so more closely.

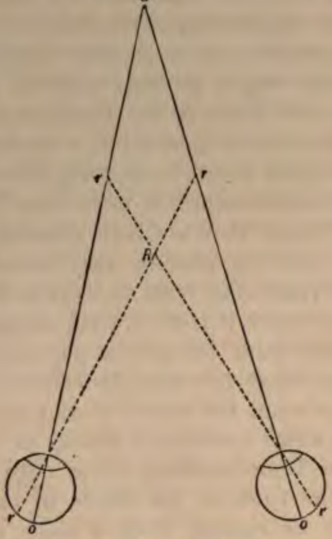
The first thing it does is to set right the impression of the object, which is produced on the retina upside down. That original inversion is, as we know, brought about in the following manner. As each point of the visible object sends forth its rays towards all sides in a rectilinear direction, the rays from its upper extremity cross those from its lower extremity in the narrow aperture of the pupil, by which the former impinge upon the bottom, the latter upon the top, those projected from the right side upon the left, and *vice versa*. The refracting apparatus of the eye, which consists of the *humor aqueus, lens, et corpus vitreum*, only serves to concentrate the rays of light proceeding from the object, so as to find room for them on the small space of the retina. Now, if seeing consisted in mere sensation, we should perceive the impression of the object turned upside down, because we receive it thus; but in that case we should perceive it as something within our eye, for we should stop short at the sensation. In reality, however, the Understanding steps in at once with its causal law, and as it has received from sensation the datum of the direction in which the ray impinged upon the retina, it pursues that direction retrogressively up to the cause on both lines; so that this time the crossing takes place in the opposite direction, and the cause presents itself upright as an external object in Space, *i.e.* in the position in which it originally sent forth its rays, not that in which they reached



the retina (see fig. 1).—The purely intellectual nature of this process, to the exclusion of all other, more especially of physiological, explanations, may also be confirmed by the fact, that if we put our heads between our legs, or lie down on a hill head downwards, we nevertheless see objects in their right position, and not upside down; although the portion of the retina which is usually met by the lower part of the object is then met by the upper: in fact, everything is topsy turvy excepting the Understanding.

II The *second* thing which the Understanding does in converting sensation into perception, is to make a single perception out of a double sensation; for each eye in fact receives its own separate impression from the object we are looking at; each even in a slightly different direction: nevertheless that object presents itself as a single one. This can only take place in the Understanding, and the process by which it is brought about is the following: Our eyes are never quite parallel, excepting when we look at a distant object, *i.e.* one which is more than 200 feet from us. At other times they are both directed towards the object we are viewing, whereby they converge, so as to make the lines proceeding from each eye to the exact point of the object on which it is fixed, form an *angle*, called the *optic angle;* the lines themselves are called *optic axes.* Now, when the object lies straight before us, these lines exactly impinge upon the centre of each retina, therefore in two points which correspond exactly to each other in each eye. The Understanding, whose only business it is to look for the *cause* of all things, at once recognises the impression as coming from *a single* outside point, although here the sensation is double, and attributes it to *one* cause, which therefore presents itself as a single object. For all that is perceived by us, is perceived as a *cause*—that is to say, as the cause of an effect we have experienced, consequently *in the Understanding.* As, nevertheless, we take in not only a single point, but a considerable surface of the object with both eyes, and yet perceive it as a single object, it will be necessary to pursue this explanation still further. All those parts of the object which lie to one side of the vertex of the optic angle no longer send their rays straight into the centre, but to the side, of the retina in each eye; in both sides, however, to the same, let us say the left, side. The points therefore upon which these rays impinge, ***correspond symmetrically to each other***, as well as the centres—in other words, they are ***homonymous points***. The Understanding soon learns to know them, and accordingly extends the above-mentioned rule of its causal perception to them also; consequently it not only refers those rays which impinge upon the centre of each retina, but those also which impinge upon all the other symmetrically corresponding places in both retinas, to a single radiant point in the object viewed: that is, it sees all these points likewise as single, and the entire

Fig.2.



object also. Now, it should be well observed, that in this process it is not the outer side of one retina which corresponds to the outer side of the other, and the inner to the inner of each, but the right side of one retina which corresponds to the right side of the other, and so forth; so that this symmetrical correspondence must not be taken in a physiological, but in a geometrical sense. Numerous and very clear illustrations of this process, and of all the phenomena which are connected with it, are to be found in Robert Smith's "Optics," and partly also in Kästner's German translation (1755). I only give *one* (fig. 2), which, properly speaking, represents a special case, mentioned further on, but which may also serve to illustrate the whole, if we leave the point R out of question. According to this illustration, we invariably direct both eyes equally towards the object, in order that the symmetrically corresponding places on both retinas may catch the rays projected from the same points. Now, when we move our eyes upwards and downwards, to the sides, and in all directions, the point in the object which first impinged upon the central point of each retina, strikes a different place every time, but in all cases one which, in each eye, corresponds to the place bearing the same name in the other eye. In examining (*perlustrare*) an object, we let our eyes glide backwards and forwards over it, in order to bring each point of it successively into contact with the centre of the retina, which sees most distinctly: we feel it all over with our eyes. It is therefore obvious that seeing singly with two eyes is in fact the same process as feeling a body with ten fingers, each of which receives a different impression, each moreover in a different direction: the totality of these impressions being nevertheless recognised by the Understanding as proceeding from *one* object, whose shape and size it accordingly apprehends and constructs in Space. This is why it is possible for a blind man to become a sculptor, as was the case, for instance, with the famous Joseph Kleinhaus, who died in Tyrol, 1853, having been a sculptor from his fifth year.[1] For, no matter from what cause it may have derived its data, perception is invariably an operation of the Understanding.

But just as a single ball seems to me double, if I touch it with my fingers crossed—since my Understanding, at once reverting to the cause and constructing it according to the laws of Space, takes for granted that the fingers are in their normal position and of course cannot do otherwise than attribute two spherical surfaces, which come in contact with the outer sides of the first and middle fingers, to two different balls—just so also does an object seem double, if my eyes, instead of converging symmetrically and enclosing the optic angle at a single point of the object, each view it at a different inclination—in other words, if I squint. For the rays, which in this case emanate from *one* point of the object, no longer impinge upon those symmetrically corresponding points in both retinas with which my mind has grown familiar by long experience, but upon other, quite different ones which, in a symmetrical position of the eyes, could only be affected in this way by different bodies; I therefore now see *two* objects, precisely because perception takes place by means of, and within, the Understanding.—The same thing happens without squinting when, for instance, I look fixedly at the furthest of two objects placed at unequal distances before me, and complete the optic angle at it; for then the rays emanating from the nearer object do not impinge upon symmetrically corresponding places in both retinas, wherefore my Understanding attributes them to two objects, *i.e.* I see the nearer object double (see fig. 2, page 70). If, on the contrary, I complete the optic angle at the nearer object, by looking steadily at it, the further object appears double. It is easy to test this by holding a pencil two feet from the eyes, and looking alternately at it and at some other more distant object behind it.

---

[1] The Frankfort "Konversationsblatt," July 22, 1853, gives the following account of this sculptor:—"The blind sculptor, Joseph Kleinhaus, died at Nauders, in Tyrol, on the 10th inst. Having lost his eyesight through small-pox when he was five years old, he began to amuse himself with carving and modelling, as a pastime. Prugg gave him some instructions, and supplied him with models, and at the age of twelve he carved a Christ in life-size. During a short stay in Nissl's workshop at Fügen, his progress was so rapid, that, thanks to his good capacities and talents, his fame as the blind sculptor soon spread far and wide. His works are numerous and of various kinds. His Christs alone, of which there are about four hundred, bear special witness to his proficiency, particularly if his blindness is taken into consideration. He sculptured many other objects besides, and, but two months ago, he modelled a bust of the Emperor Franz Joseph of Austria which has been sent to Vienna."

But the finest thing of all is, that this experiment may quite well be reversed: so that, with two real objects straight before and close to us, and with our eyes wide open, we nevertheless see but *one*. This is the most striking proof that perception is a work of the Understanding and by no means contained in sensation. Let two cardboard tubes, about 8 inches long and 1½ inches in diameter, be fastened parallel to one another, like those of a binocular telescope, and fix a shilling at the end of each tube. On applying our eyes to the opposite extremity and looking through the tubes, we shall see only *one* shilling surrounded by *one* tube. For in this case the eyes being forced into a completely parallel position, the rays emanating from the coins impinge exactly upon the centres of the two retinas and those points which immediately surround them, therefore upon places which correspond symmetrically to each other; consequently the Understanding, taking for granted the usual convergent position of the optic axes when objects are near, admits but one object as the cause of the reflected rays. In other words, we see but one object; so direct is the act of causal apprehension in the Understanding.

We have not space enough here to refute one by one the physiological explanations of single vision which have been attempted; but their fallacy is shown by the following considerations:—

1°. If seeing single were dependent upon an organic connection, the corresponding points in both retinas, on which this phenomenon is shown to depend, would correspond *organically*, whereas they do so in a merely *geometrical* sense, as has already been said. For, organically speaking, the two inner and two outer corners of the eyes are those which correspond, and so it is with the other parts also; whereas for the purpose of single vision, it is the right side of the right retina which corresponds to the right side of the left retina, and so on, as the phenomena just described irrefutably show. It is also precisely on account of the intellectual character of the process, that only the most intelligent animals, such as the higher mammalia and birds of prey—more especially owls—have their eyes placed so as to enable them to direct both optic axes to the same point.

2°. The hypothesis of a confluence or partial intersection of the optic nerves before entering the brain, originated by Newton,[1] is false, simply because it would then be impossible to see double by squinting. Vesalius and Cæsalpinus besides have already brought forward anatomical instances in which subjects saw single, although neither fusion nor even contact of the optic nerves had taken place. A final argument against the hypothesis of a mixed impression is supplied by the fact, that on closing our right eye firmly and looking at the sun with our left, the bright image which persists for a time is always in the left, never in the right, eye: and *vice versa*.

[1] Newton, "Optics." Query 15.

The *third* process by which the Understanding converts III sensation into perception, consists in constructing bodies out of the simple surfaces hitherto obtained—that is, in adding the third dimension. This it does by estimating the expansion of bodies in this third dimension in Space—which is known to the Understanding *à priori*—through Causality, according to the degree in which the eye is affected by the objects, and to the gradations of light and shade. In fact, although objects fill Space in all three dimensions, they can only produce an impression upon the eye with two; for the nature of that organ is such, that our sensation, in seeing, is merely planimetrical, not stereometrical. All that is stereometrical in our perception is added by the Understanding, which has for its sole data the direction whence the eye receives its impression, the limits of that impression, and the various gradations of light and dark: these data directly indicate their causes, and enable us to distinguish whether what we have before us is a disk or a ball. This mental process, like the preceding ones, takes place so immediately and with such rapidity, that we are conscious of nothing but the result. It is this which makes perspective drawing so difficult a problem, that it can only be solved by mathematics and has to be learnt; although all it has to do, is to represent the sensation of seeing as it presents itself to our Understanding as a datum for the third process: that is, visual sensation in its merely planimetrical extension, to the *two* dimensions of which extension, together with the said data in them, the Understanding forthwith adds the *third*, in contemplating a drawing as well as in contemplating reality. Perspective drawing is, in fact, a sort of writing which can be read as easily as printed type, but which few are able to write; precisely because our intellect, in perceiving, only apprehends effects with a view to constructing their causes, immediately losing sight of the former as soon as it has discovered the latter. For instance, we instantly recognise a chair, whatever position it may be in; while drawing a chair in any position belongs to the art which abstracts from this third process of the Understanding, in order to present the data alone for the spectator himself to complete. In its narrowest acceptation, as we have already seen, this is the art of drawing in perspective; in a more comprehensive sense, it is the whole art of painting. A painting presents us with outlines drawn according to the rules of perspective; lighter and darker places proportioned to the effect of light and shade; finally patches of colouring, which are determined as to quality and intensity by the teaching of experience. This the spectator reads and interprets by referring similar effects to their accustomed causes. The painter's art consists in consciously retaining the data of visual sensation in the artist's memory, as they are *before* this third intellectual process; while we, who are not artists, cast them aside without retaining them in our memory, as soon as we have made use of them for the purpose described above. We shall become still better acquainted with this third intellectual process by now passing on to a fourth, which, from its intimate connection with the third, serves to elucidate it.

IV This *fourth* operation of the Understanding consists in acquiring knowledge of the distance of objects from us: it is this precisely which constitutes that third dimension of which we have been speaking. Visual sensation, as we have said, gives us the *direction* in which objects lie, but not their *distance* from us: that is, not their *position*. It is for the *Understanding* therefore to find out this distance; or, in other words, the distance must be inferred from purely *causal* determinations. Now the most important of these is the *visual angle*, which objects subtend; yet even this is quite ambiguous and unable to decide anything by itself. It is like a word of double meaning:

the sense, in which it is to be understood, can only be gathered from its connection with the rest. An object subtending the same visual angle may in fact be small and near, or large and far off; and it is only when we have previously ascertained its size, that the visual angle enables us to recognise its distance: and conversely, its size, when its distance is known to us. Linear perspective is based upon the fact that the visual angle diminishes as the distance increases, and its principles may here be easily deduced. As our sight ranges equally in all directions, we see everything in reality as from the interior of a hollow sphere, of which our eye occupies the centre. Now in the first place, an infinite number of intersecting circles pass through the centre of this sphere in all directions, and the angles measured by the divisions of these circles are the possible angles of vision. In the second place, the sphere itself modifies its size according to the length of radius we give to it; therefore we may also imagine it as consisting of an infinity of concentric, transparent spheres. As all radii diverge, these concentric spheres augment in size in proportion to their distance from us, and the degrees of their sectional circles increase correspondingly: therefore the true size of the objects which occupy them likewise increases. Thus objects are larger or smaller according to the size of the spheres of which they occupy similar portions—say 10°—while their visual angle remains unchanged in both cases, leaving it therefore undecided, whether the 10° occupied by a given object belong to a sphere of 2 miles, or of 10 feet diameter. Conversely, if the size of the object has been ascertained, the number of degrees occupied by it will diminish in proportion to the distance and the size of the sphere to which we refer it, and all its outlines will contract in similar proportion. From this ensues the fundamental law of all perspective; or, as objects and the intervals between them must necessarily diminish in constant proportion to their distance from us, all their outlines thereby contracting, the result will be, that with increasing distance, what is above us will descend, what is below us will ascend, and all that lies at our sides will come nearer together. This progressive convergence, this linear perspective, no doubt enables us to estimate distances, so far as we have before us an uninterrupted succession of visibly connected objects; but we are not able to do this by means of the visual angle alone, for here the help of another datum is required by the Understanding, to act, in a sense, as commentary to the visual angle, by indicating more precisely the share we are to attribute to distance in that angle. Now there are four principal data of this kind, which I am about to specify. Thanks to these data, even where there is no linear perspective to guide us, if a man standing at a distance of 200 feet appears to me subtending a visual angle twenty-four times smaller than if he were only 2 feet off, I can nevertheless in most cases estimate his size correctly. All this proves once more that perception is not only a thing of the senses, but of the intellect also.—I will here add the following special and interesting fact in corroboration of what I have said about the basis of linear perspective as well as about the intellectual nature of all perception. When I have looked steadily at a coloured object with sharply defined outlines—say a red cross—long enough for the physiological image to form in my eye as a green cross, the further the surface on to which I project it, the larger it will appear to me: and *vice versa*. For the image itself occupies an unvarying portion of my retina, *i.e.* the portion originally affected by the red cross; therefore when referred outwards, or, in other words, recognised as the effect of an external object, it forms an unchanging visual angle, say of 2°. Now if, in this case, where all commentary to the visual angle is wanting, I remove it to a distant surface, with which I necessarily identify it as belonging to its effect, the cross will occupy 2° of a distant and therefore larger sphere, and is consequently large. If, on the other hand, I project the image on to a nearer object, it will occupy 2° of a smaller sphere, and is therefore small. The resulting perception is in both cases completely objective, quite like that of an external object; and as it proceeds from an entirely subjective reason (from the image having been excited in quite a different way), it thus confirms the intellectual character of all objective perception.—This phenomenon (which I distinctly remember to have been the first to notice, in 1815) forms the theme of an essay by Séguin, published in the "*Comptes rendus*" of the 2nd August, 1858, where it is served up as a new discovery, all sorts of absurd and distorted explanations of it being given. *Messieurs les illustres confrères* let pass no opportunity for heaping experiment upon experiment, the more complicated the better. *Expérience!* is their watchword; yet how rarely do we meet with any sound, genuine reflection upon the phenomena observed! *Expérience! expérience!* followed by twaddle.

To return to the subsidiary data which act as commentaries to a given visual angle, we find foremost among them the *mutationes oculi internæ*, by means of which the eye adapts its refractory apparatus to various distances by increasing and diminishing the refraction. In what these modifications consist, has not yet been clearly ascertained. They have been sought in the increased convexity, now of the *cornea*, now of the crystalline *lens;* but the latest theory seems to me the most probable one, according to which the lens is moved backwards for distant vision and forwards for near vision, lateral pressure, in the latter case, giving it increased protuberance; so that the process would exactly resemble the mechanism of an opera-glass.

Kepler, however, had, in the main, already expressed this theory, which may be found explained in A. Hueck's pamphlet, "Die Bewegung der Krystallinse," 1841. If we are not clearly conscious of these inner modifications of the eye, we have at any rate a certain feeling of them, and of this we immediately avail ourselves to estimate distances. As however these modifications are not available for the purposes of clear sight beyond the range of from about 7 inches to 16 feet, the Understanding is only able to apply this datum within those limits.

(b) Beyond them, however, the second datum becomes available: that is to say, the *optic angle*, formed by the two optic axes, which we had occasion to explain when speaking of single vision. It is obvious that this optic angle becomes smaller, the further the object is removed: and *vice versa*. This different direction of the eyes, with respect to each other, does not take place without producing a slight sensation, of which we are nevertheless only in so far conscious as the Understanding makes use of it, as a datum, in estimating distances intuitively. By this datum we are not only enabled to cognize the distance, but the precise position of the object viewed, by means of the parallax of the eyes, which consists in each eye seeing the object in a slightly different direction; so that if we close one eye, the object seems to move. Thus it is not easy to snuff a candle with one eye shut, because this datum is then wanting. But as the direction of the eyes becomes parallel as soon as the distance of the object reaches or exceeds 200 feet, and as the optic angle consequently then ceases to exist, this datum only holds good within the said distance.

(c) Beyond it, the Understanding has recourse to *atmospheric perspective*, which indicates a greater distance by means of the increasing dimness of all colours, of the appearance of physical blue in front of all dark objects (according to Göthe's perfectly correct and true theory of colours), and also of the growing indistinctness of all outlines. In Italy, where the atmosphere is very transparent, this datum loses its power and is apt to mislead: Tivoli, for instance, seems to be very near when seen from Frascati. On the other hand, all objects appear larger in a mist, which is an abnormal exaggeration of the datum; because our Understanding assumes them to be further from us.

Finally, there remains the estimation of distance by means of the size (known to us intuitively) of intervening objects, such as fields, woods, rivers, &c. &c. This mode of estimation is only applicable where there is uninterrupted succession: in other words, it can only be applied to terrestrial, not to celestial objects. Moreover, we have in general more practice in using it horizontally than vertically: a ball on the top of a tower 200 feet high appears much smaller to us than when lying on the ground 200 feet from us; because, in the latter case, we estimate the distance more accurately. When we see human beings in such a way, that what lies between them and ourselves is in a great measure hidden from our sight, they always appear strikingly small.

The fact that our Understanding assumes everything it perceives in a horizontal direction to be farther off, therefore larger, than what is seen in a vertical direction, must partly be attributed to this last mode of estimating distances, inasmuch as it only holds good when applied horizontally and to terrestrial objects; but partly also to our estimation of distances by atmospheric perspective, which is subject to similar conditions. This is why the moon seems so much larger on the horizon than at its zenith, although its visual angle accurately measured—that is, the image projected by it on to the eye—is not at all larger in one case than in the other; and this also accounts for the flattened appearance of the vault of the sky: that is to say, for its appearing to have greater horizontal than vertical extension. Both phenomena therefore are purely intellectual or cerebral, not optical. If it be objected, that even when at its zenith, the moon occasionally has a hazy appearance without seeming to be larger, we answer, that neither does it in that case appear red; for its haziness proceeds from a greater density of vapours, and is therefore of a different kind from that which proceeds from atmospheric perspective. To this may be added what I have already said: that we only apply this mode of estimating distances in a horizontal, not in a perpendicular, direction; besides, in this case, other correctives come into play. It is related of Saussure that, when on the Mont Blanc, he saw so enormous a moon rise, that, not recognising what it was, he fainted with terror.

The properties of the telescope and magnifying glass, on the other hand, depend upon a separate estimate according to the visual angle alone: *i.e.*, that of size by distance, and of distance by size; because here the four other supplementary means of estimating distances are excluded. The telescope in reality magnifies objects, while it only seems to bring them nearer; because their size being known to us empirically, we here account for its apparent increase by a diminution of their distance from us. A house seen through a telescope, for instance, seems to be ten times nearer, not ten times larger, than seen with the naked eye. The magnifying glass, on the contrary, does not really magnify, but merely enables us to bring the object nearer to our eyes than would otherwise be possible; so that it only appears as large as it would at that distance even without the magnifying glass. In fact, we are prevented from seeing objects distinctly at less than from eight to ten inches' distance from our eyes, by the insufficient convexity of the ocular lens and cornea; but if we increase the refraction by substituting the convexity of the magnifying glass for that of the lens and cornea, we then obtain a clear image of objects even when they are as near as half an inch from our eyes. Objects thus seen in close proximity to us and in the size corresponding to that proximity, are transferred by our Understanding to the distance at which we naturally see distinctly, *i.e.* to about eight or ten inches from our eyes, and we then estimate their magnitude according to this distance and to the given visual angle.

I have entered thus fully into detail concerning all the different processes by which seeing is accomplished, in order to show clearly and irrefragably that the predominant factor in them is *the Understanding*, which, by conceiving each change as an *effect* and referring that effect to its *cause*, produces the cerebral phenomenon of the objective world on the basis of the *à priori* fundamental intuitions of Space and Time, for which it receives merely a few data from the senses. And moreover the Understanding effects this exclusively by means of its own peculiar form, the law of Causality; therefore quite directly and intuitively, without any assistance whatever from reflection—that is, from abstract knowledge by means of conceptions and of language, which are the materials of *secondary* knowledge, *i.e.* of *thought*, therefore of *Reason*.

That this knowledge through the Understanding is independent of Reason's assistance, is shown even by the fact, that when, at any time, the Understanding attributes a given effect to a wrong cause, actually perceiving that cause, whereby *illusion* arises, our Reason, however clearly it may recognise *in abstracto* the true state of the matter, is nevertheless unable to assist the Understanding, and the illusion persists undisturbed in spite of that better knowledge. The above-mentioned phenomena of seeing and feeling double, which result from an abnormal position of the organs of touch and sight, are instances of such illusions; likewise the apparently increased size of the rising moon; the image which forms in the focus of a concave mirror and exactly resembles a solid body floating in space; the painted relievo which we take for real; the apparent motion of a shore or bridge on which we are standing, if a ship happens to pass along or beneath it; the seeming proximity of very lofty mountains, owing to the absence of atmospheric perspective, which is the result of the purity of the air round their summits. In these and in a multitude of similar cases, our Understanding takes for granted the existence of the usual cause with which it is conversant and forthwith perceives it, though our Reason has arrived at the truth by a different road; for, the knowledge of the Understanding being anterior to that of the Reason, the intellect remains inaccessible to the teaching of the Reason, and thus the *illusion*—that is, the deception of the Understanding—remains immovable; albeit *error*—that is, the deception of the Reason—is obviated.—That which is correctly known by the Understanding is *reality:* that which is correctly known by the Reason is *truth*, or in other terms, a judgment having a sufficient reason; *illusion* (that which is wrongly perceived) we oppose to *reality:* *error* (that which is wrongly thought) to *truth.*

The purely formal part of empirical perception—that is, Space, Time, and the law of Causality—is contained *à priori* in the intellect; but this is not the case with the application of this formal part to empirical data, which has to be acquired by the Understanding through practice and experience. Therefore new-born infants, though they no doubt receive impressions of light and of colour, still do not apprehend or indeed, strictly speaking, see objects. The first weeks of their existence are rather passed in a kind of stupor, from which they awaken by degrees when their Understanding begins to apply its function to the data supplied by the senses, especially those of touch and of sight, whereby they gradually gain consciousness of the objective world. This newly-arising consciousness may be clearly recognised by the look of growing intelligence in their eyes and a degree of intention in their movements, especially in the smile with which they show for the first time recognition of those who take care of them. They may even be observed to make experiments for a time with their sight and touch, in order to complete their apprehension of objects by different lights, in different directions and at different distances: thus pursuing a silent, but serious course of study, till they have succeeded in mastering all the intellectual operations in seeing which have been described. The fact of this schooling can be ascertained still more clearly through those who, being born blind, have been operated upon late in life, since they are able to give an account of their impressions. Cheselden's blind man[1] was not an isolated instance, and we find in all similar cases the fact corroborated, that those who obtain their sight late in life, no doubt, see light, outlines, and colours, as soon as the operation is over, but that they have no objective perception of objects until their Understanding has learnt to apply its causal law to data and to changes which are new to it. On first beholding his room and the various objects in it, Cheselden's blind man did not distinguish one thing from another; he simply received the general impression of a totality all in one piece, which he took for a smooth, variegated surface. It never occurred to him to recognise a number of detached objects, lying one behind the other at different distances. With blind people of this sort, it is by the sense of touch, to which objects are already known, that they have to be introduced to the sense of sight. In the beginning, the patient has no appreciation whatever of distances and tries to lay hold of everything. One, when he first saw his own house from outside, could not conceive how so small a thing could contain so many rooms. Another was highly delighted to find, some weeks after the operation, that the engravings hanging on the walls of his room represented a variety of objects. The "Morgenblatt" of October 23rd, 1817, contains an account of a youth who was born blind, and obtained his sight at the age of seventeen. He had to learn intelligent perception, for at first sight he did not even recognise objects previously known to him through the sense of touch. Every object had to be introduced to the sense of sight by means of the sense of touch. As for the distances of the objects he saw, he had no appreciation whatever of them, and tried to lay hold indiscriminately of everything, far or near.—Franz expresses himself as follows:[1]—

---

[1] See the original report in vol. 35 of the "Philosophical Transactions" as to this case.

> "A definite idea of distance, as well as of form and size, is only obtained by sight and touch, and by reflecting on the impressions made on both senses; but for this purpose we must take into account the muscular motion and voluntary locomotion of the individual.—Caspar Hauser, in a detailed account of his own experience in this respect, states, that upon his first liberation from confinement, whenever he looked through the window upon external objects, such as the street, garden, &c., it appeared to him as if there were a shutter quite close to his eye, and covered with confused colours of all kinds, in which he could recognise or distinguish nothing singly. He says farther, that he did not convince himself till after some time during his walks out of doors, that what had at first appeared to him as a shutter of various colours, as well as many other objects, were in reality very different things; and that at length the shutter disappeared, and he saw and recognised all things in their just proportions. Persons born blind who obtain their sight by an operation in later years only, sometimes imagine that all objects touch their eyes, and lie so near to them that they are afraid of stumbling against them; sometimes they leap towards the moon, supposing that they can

---

[1] Franz, "The Eye, a treatise on preserving this organ in a healthy state and improving the sight." London, Churchill, 1839, pp. 34-36.

lay hold of it; at other times they run after the clouds moving along the sky, in order to catch them, or commit other such extravagancies. Since ideas are gained by reflection upon sensation, it is further necessary in all cases, in order that an accurate idea of objects may be formed from the sense of sight, that the powers of the mind should be unimpaired, and undisturbed in their exercise. A proof of this is afforded in the instance related by Haslam,[1] of a boy who had no defect of sight, but was weak in understanding, and who in his seventh year was unable to estimate the distances of objects, especially as to height; he would extend his hand frequently towards a nail on the ceiling, or towards the moon, to catch it. It is therefore the judgment which corrects and makes clear this idea, or perception of visible objects."

The intellectual nature of perception as I have shown it, is corroborated physiologically by Flourens[2] as follows:—

"Il faut faire une grand distinction entre les sens et l'intelligence. L'ablation d'un tubercule détermine la perte de la *sensation*, du *sens* de la vue; la rétine devient insensible, l'iris devient immobile. L'ablation d'un lobe cérébral laisse la *sensation*, le *sens*, la *sensibilité* de la rétine, la *mobilité* de l'iris; elle ne détruit que la *perception* seule. Dans un cas, c'est un fait *sensorial;* et, dans l'autre, un fait *cérébral;* dans un cas, c'est la perte du *sens;* dans l'autre, c'est la perte de la *perception.* La distinction des perceptions et des sensations est encore un grand résultat; et il est démontré aux yeux. Il y a deux moyens de faire perdre la vision par l'encéphale: 1° par les tubercules, c'est la perte du sens, de la sensation; 2° par les lobes, c'est la perte de la perception, de l'intelligence. La sensibilité n'est donc pas l'intelligence; penser n'est donc pas sentir; et voilà toute une philosophie renversée. L'idée n'est donc pas la sensation; et voilà encore une autre preuve du vice radical de cette philosophie." And again, p. 77, under the heading: Séparation de la Sensibilité et de la Perception:—"Il y a une de mes expérences qui sépare nettement la *sensibilité* de la *perception.* Quand on enlève le *cerveau proprement dit* (*lobes* ou *hémisphères cérébraux*) à un animal, l'animal perd la vue. Mais, par rapport a l'œil, rien n'est changé: les objets continuent à se peindre sur la rétine; l'*iris* reste contractile, le *nerf optique* sensible, parfaitement sensible. Et cependant l'animal ne voit plus; il n'y a plus *vision*, quoique tout ce qui est *sensation* subsiste; il n'y a plus *vision*, parce qu'il n'y a plus *perception*. Le *percevoir*, et non le *sentir*, est donc le premier élément de l'*intelligence*. La *perception* est partie de l'*intelligence*, car elle se perd avec l'*intelligence*, et par l'ablation du même organe, les *lobes* ou *hémisphères cérébraux;* et la *sensibilité* n'en est point partie, puisqu'elle subsiste après la perte de l'*intelligence* et l'ablation des *lobes* ou *hémisphères*."

---

[1] Haslam's "Observations on Madness and Melancholy," 2nd ed. p. 192.

[2] Flourens, "De la vie et de l'Intelligence," 2nd edition, Paris, Garnier Frères, 1852, p. 49.

The following famous verse of the ancient philosopher Epicharmus, proves that the ancients in general recognized the intellectual nature of perception: Νοῦς ὁρῇ καὶ νοῦς ἀκούει· τἆλλα κωφὰ καὶ τυφλά. (*Mens videt, mens audit; cætera surda et cæca.*)[1] Plutarch in quoting this verse, adds:[2] ὡς τοῦ περὶ τὰ ὄμματα καὶ ὦτα πάθους, ἂν μὴ παρῇ τὸ φρονοῦν, αἴσθησιν οὐ ποιοῦντος (*quia affectio oculorum et aurium nullum affert sensum, intelligentia absente*). Shortly before too he says: Στράτωνος τοῦ φυσικοῦ λόγος ἐστίν, ἀποδεικνύων ὡς οὐδ' αἰσθάνεσθαι τυπαράπαν ἄνευ τοῦ νοεῖν ὑπάρχει. (*Stratonis physici exstat ratiocinatio, qua "sine intelligentia sentiri omnino nihil posse" demonstrat.*)[3] Again shortly after he says: ὅθεν ἀνάγκη, πᾶσιν, οἷς τὸ αἰσθάνεσθαι, καὶ τὸ νοεῖν ὑπάρχειν, εἰ τῷ νοεῖν αἰσθάνεσθαι πεφύκαμεν (*quare necesse est, omnia, quæ sentiunt, etiam intelligere, siquidem intelligendo demum sentiamus*).[4] A second verse of Epicharmus might be connected with this, which is quoted by Diogenes Laertes (iii. 16):

Εὔμαιε, τὸ σοφόν ἐστιν οὐ καθ' ἓν μόνον,
ἀλλ' ὅσα περ ζῇ, πάντα καὶ γνώμαν ἔχει.

---

[1] "It is the mind that sees and hears; all besides is deaf and blind." (Tr. Ad.)

[2] Plutarch, "De solert. animal." c. 3. "For the affection of our eyes and ears does not produce any perception, unless it be accompanied by thought." (Tr. Ad.)

[3] "Straton, the physicist, has proved that 'without thinking it is quite impossible to perceive.'" (Tr. Ad.)

[4] "Therefore it is necessary that all who perceive should also think, since we are so constituted as to perceive by means of thinking." (Tr. Ad.)

(*Eumaee, sapientia non uni tantum competit, sed quæcunque vivunt etiam intellectum habent.*) Porphyry likewise endeavours to show at length that all animals have understanding.[1]

Now, that it should be so, follows necessarily from the intellectual character of perception. All animals, even down to the very lowest, must have Understanding—that is, knowledge of the causal law, although they have it in very different degrees of delicacy and of clearness; at any rate they must have as much of it as is required for perception by their senses; for sensation without Understanding would be not only a useless, but a cruel gift of Nature. No one, who has himself any intelligence, can doubt the existence of it in the higher animals. But at times it even becomes undeniably evident that their knowledge of causality is actually *à priori*, and that it does not arise from the habit of seeing one thing follow upon another. A very young puppy will not, for instance, jump off a table, because he foresees what would be the consequence. Not long ago I had some large curtains put up at my bedroom window, which reached down to the floor, and were drawn aside from the centre by means of a string. The first morning they were opened I was surprised to see my dog, a very intelligent poodle, standing quite perplexed, and looking upwards and sidewards for the cause of the phenomenon: that is, he was seeking for the change which he knew *à priori* must have taken place. Next day the same thing happened again.—But even the lowest animals have perception—consequently Understanding—down to the aquatic polypus, which has no distinct organs of sensation, yet wanders from leaf to leaf on its waterplant, while clinging to it with its feelers, in search of more light.

Nor is there, indeed, any difference, beyond that of degree, between this lowest Understanding and that of man, which we however distinctly separate from his Reason. The intermediate gradations are occupied by the various series of animals, among which the highest, such as the monkey, the elephant, the dog, astonish us often by their intelligence. But in every case the business of the Understanding is invariably to apprehend directly causal relations: first, as we have seen, those between our own body and other bodies, whence proceeds objective perception; then those between these objectively perceived bodies among themselves, and here, as has been shown in § 20, the causal relation manifests itself in three forms—as cause, as stimulus, and as motive. All movement in the world takes place according to these three forms of the causal relation, and through them alone does the intellect comprehend it. Now, if, of these three, *causes*, in the narrowest sense of the word, happen to be the object of investigation for the Understanding, it will produce Astronomy, Mechanics, Physics, Chemistry, and will invent machines for good and for evil; but in all cases a direct, intuitive apprehension of the causal connection will in the last resort lie at the bottom of all its discoveries. For the sole form and function of the Understanding is this apprehension, and not by any means the complicated machinery of Kant's twelve Categories, the nullity of which I have proved.—(All comprehension is a direct, consequently intuitive, apprehension of the causal connection; although this has to be reduced at once to abstract conceptions in order to be fixed. To calculate therefore, is not to understand, and, in itself, calculation conveys no comprehension of things. Calculation deals exclusively with abstract conceptions of magnitudes, whose mutual relations it determines. By it we never attain the slightest comprehension of a physical process, for this requires *intuitive* comprehension of space-relations, by means of which causes take effect.

---

[1] Porph. "De abstinentia," iii. 21.

Calculations have merely practical, not theoretical, value. It may even be said that *where calculation begins, comprehension ceases;* for a brain occupied with numbers is, as long as it calculates, entirely estranged from the causal connection in physical processes, being engrossed in purely abstract, numerical conceptions. The result, however, only shows us *how much*, never *what*. "*L'expérience et le calcul*," those watchwords of French physicists, are not therefore by any means adequate [for thorough insight].)— If, again, *stimuli* are the guides of the Understanding, it will produce Physiology of Plants and Animals, Therapeutics, and Toxicology. Finally, if it devotes itself to the study of *motives*, the Understanding will use them, on the one hand, theoretically, to guide it in producing works on Morality, Jurisprudence, History, Politics, and even Dramatic and Epic Poetry; on the other hand, practically, either merely to train animals, or for the higher purpose of making human beings dance to its music, when once it has succeeded in discovering which particular wire has to be pulled in order to move each puppet at its pleasure. Now, with reference to the function which effects this, it is quite immaterial whether the intellect turns gravitation ingeniously to account, and makes it serve its purpose by stepping in just at the right time, or whether it brings the collective or the individual propensities of men into play for its own ends. In its practical application we call the Understanding *shrewdness* or, when used to outwit others, *cunning;* when its aims are very insignificant, it is called *slyness* and, if combined with injury to others, *craftiness*. In its purely theoretical application, we call it simply *Understanding*, the higher degrees of which are named *acumen, sagacity, discernment, penetration*, while its lower degrees are termed *dulness, stupidity, silliness*, &c. &c. These widely differing degrees of sharpness are innate, and cannot be acquired; although, as I have already shown, even in the earliest stages of the application of the Understanding, *i.e.* in empirical perception, practice and knowledge of the material to which it is applied, are needed. Every simpleton has Reason—give him the premisses, and he will draw the conclusion; whereas *primary*, consequently intuitive, knowledge is supplied by the Understanding: herein lies the difference. The pith of every great discovery, of every plan having universal historical importance, is accordingly the product of a happy moment in which, by a favourable coincidence of outer and inner circumstances, some complicated causal series, some hidden causes of phenomena which had been seen thousands of times before, or some obscure, untrodden paths, suddenly reveal themselves to the intellect.–

By the preceding explanations of the processes in seeing and feeling, I have incontestably shown that empirical perception is essentially the work of *the Understanding*, for which the material only is supplied by the senses in sensation—and a poor material it is, on the whole; so that *the Understanding* is, in fact, the artist, while the senses are but the under-workmen who hand it the materials. But the process consists throughout in referring from given effects to their causes, which by this process are enabled to present themselves as objects in Space. The very fact that we presuppose Causality in this process, proves precisely that this law must have been supplied by the Understanding itself; for it could never have found its way into the intellect from outside. It is indeed the first condition of all empirical perception; but this again is the form in which all external experience presents itself to us; how then can this law of Causality be derived from experience, when it is itself essentially presupposed by experience?—It was just because of the utter impossibility of this, and because Locke's philosophy had put an end to all *à priority*, that Hume denied the whole reality of the conception of

Causality. He had besides already mentioned two false hypotheses in the seventh section of his "Inquiry concerning the Human Understanding," which recently have again been advanced: the one, that the effect of the will upon the members of our body; the other, that the resistance opposed to our pressure by outward objects, is the origin and prototype of the conception of Causality. Hume refutes both in his own way and according to his own order of ideas. I argue as follows. There is no causal connection whatever between acts of the will and actions of the body; on the contrary, both are immediately one and the same thing, only perceived in a double aspect—that is, on the one hand, in our self-consciousness, or inner sense, as acts of the will; on the other, simultaneously in exterior, spacial brain-perception, as actions of the body.[1] The second hypothesis is false, first because, as I have already shown at length, a mere sensation of touch does not yet give any objective perception whatever, let alone the conception of Causality, which never can arise from the feeling of an impeded muscular effort: besides impediments of this kind often occur without any external cause; secondly, because our pressing against an external object necessarily has a motive, and this already presupposes apprehension of that object, which again presupposes knowledge of Causality.—But the only means of radically proving the conception of Causality to be independent of all experience was by showing, as I have done, that the whole possibility of experience is conditioned by the conception of Causality. In § 23 I intend to show that Kant's proof, propounded with a similar intent, is false.

This is also the proper place for drawing attention to the fact, that Kant either did not clearly recognise in empirical perception the mediation of the causal law—which law is known to us before all experience—or that he intentionally evaded mentioning it, because it did not suit his purpose. In the "Critique of Pure Reason," for instance, the relation between causality and perception is not treated in the "Doctrine of Elements," but in the chapter on the "Paralogisms of Pure Reason," where one would hardly expect to find it; moreover it appears in his "Critique of the Fourth Paralogism of Transcendental Psychology," and only in the first edition.[1] The very fact that this place should have been assigned to it, shows that in considering this relation, he always had the transition from the phenomenon to the thing in itself exclusively in view, but not the genesis of perception itself. Here accordingly he says that the existence of a real external object is not given directly in perception, but can be added to it in thought and thus inferred. In Kant's eyes, however, he who does this is a Transcendental Realist, and consequently on a wrong road. For by his "outward object" Kant here means the thing in itself. The Transcendental Idealist, on the contrary, stops short at the perception of something empirically real—that is, of something existing outside us in Space—without needing the inference of a cause to give it reality. For *perception*, according to Kant, is quite directly accomplished without any assistance from the causal nexus, and consequently from the Understanding: he simply identifies perception with sensation. This we find confirmed in the passage which begins, "With reference to the reality of external objects, I need as little trust to inference," &c. &c.[2] and again in the sentence commencing with "Now we may well admit," &c. &c.[1] It is quite clear from these passages that perception of external things in Space, according to Kant, precedes all application of the causal law, therefore that the causal law does not belong to perception as an element and condition of it: for him, mere sensation is identical with perception. Only in as far as we ask what may, in a *transcendental* sense, exist *outside of us*: that is, when we ask for the thing in itself, is Causality mentioned as connected with perception. Moreover Kant admits the existence, nay, the mere possibility, of causality only in reflection: that is, in abstract, distinct knowledge by means of conceptions; therefore he has no suspicion that its application is *anterior to all reflection*, which is nevertheless evidently the case, especially in empirical, sensuous perception which, as I have proved irrefragably in the preceding analysis, could never take place otherwise. Kant is therefore obliged to leave the genesis of empirical perception unexplained. With him it is a mere matter of the senses, given as it were in a miraculous way: that is, it coincides with sensation. I should very much like my reflective readers to refer to the passages I have indicated in Kant's work, in order to convince themselves of the far greater accuracy of my view of the whole process and connection. Kant's extremely erroneous view has held its ground till now in philosophical literature, simply because no one ventured to attack it; therefore I have found it necessary to clear the way in order to throw light upon the mechanism of our knowledge.

---

[1] Compare "Die Welt a. W. u. V." 3rd edition, vol. ii. p. 41. [The 3rd edition of "Die Welt a. W. u. V." contains at this place a supplement which is wanting in the 2nd edition, vol. ii. p. 38.—Note by the Editor of the 3rd edition.]

---

[1] Kant, "Krit. d. r. V." 1st edition, p. 367 *sqq.* (English translation by M. Müller, p. 318 *sqq.*)

[2] Kant, "Krit. d. r. Vern." 1st edition, p. 371. (English translation, by M. Müller, p. 322.)

Kant's fundamental idealistic position loses nothing whatever, nay, it even gains by this rectification of mine, in as far as, with me, the necessity of the causal law is absorbed and extinguished in empirical perception as its product and cannot therefore be invoked in behalf of an entirely transcendent question as to the thing in itself. On referring to my theory above concerning empirical perception, we find that its first datum, sensation, is absolutely subjective, being a process within the organism, because it takes place beneath the skin. Locke has completely and exhaustively proved, that the feelings of our senses, even admitting them to be roused by external causes, cannot have any resemblance whatever to the qualities of those causes. Sugar, for instance, bears no resemblance at all to sweetness, nor a rose to redness. But that they should need an external cause at all, is based upon a law whose origin lies demonstrably within us, in our brain; therefore this necessity is not less subjective than the sensations themselves. Nay, even *Time*—that primary condition of every possible *change*, therefore also of the change which first permits the application of the causal law—and not less *Space*—which alone renders the externalisation of causes possible, after which they present themselves to us as objects—even Time and Space, we say, are subjective forms of the intellect, as Kant has conclusively proved. Accordingly we find all the elements of empirical perception lying within us, and nothing contained in them which can give us reliable indications as to anything differing absolutely from ourselves, anything in itself.—But this is not all. What we think under the conception *matter*, is the residue which remains over after bodies have been divested of their shape and of all their specific qualities: a residue, which precisely on that account must be identical in all bodies. Now these shapes and qualities which have been abstracted by us, are nothing but the peculiar, specially defined *way in which these bodies act*, which constitutes precisely their difference. If therefore we leave these shapes and qualities out of consideration, there remains nothing but *mere activity in general*, pure action as such, Causality itself, objectively thought—

---

[1] Kant, "Krit. d. r. Vern." 1st edition, p. 372. (English translation, p. 323.)

that is, the reflection of our own Understanding, the externalised image of its sole function; and Matter is throughout pure Causality, its essence is Action in general.[1] This is why pure Matter cannot be perceived, but can only be thought: it is a something we add to every reality, as its basis, in thinking it. For pure Causality, mere action, without any defined mode of action, cannot become perceptible, therefore it cannot come within any experience.—Thus Matter is only the objective correlate to pure Understanding; for it is Causality in general, and nothing else: just as the Understanding itself is direct knowledge of cause and effect, and nothing else. Now this again is precisely why the law of causality is not applicable to Matter itself: that is to say, Matter has neither beginning nor end, but is and remains permanent. For as, on the one hand, Causality is the indispensable condition of all alternation in the accidents (forms and qualities) of Matter, *i.e.* of all passage in and out of being; but as, on the other hand, Matter is pure Causality itself, as such, objectively viewed: it is unable to exercise its own power upon itself, just as the eye can see everything but itself. "Substance" and Matter being moreover identical, we may call *Substance, action* viewed *in abstracto: Accidents,* particular modes of action, action *in concreto.*—Now these are the results to which true, *i.e.* transcendental, Idealism leads. In my chief work I have shown that the thing in itself—*i.e.* whatever, on the whole, exists independently of our representation—cannot be got at by way of representation, but that, to reach it, we must follow quite a different path, leading through the inside of things, which lets us into the citadel, as it were, by treachery.—

But it would be downright chicanery, nothing else, to try and compare, let alone identify, such an honest, deep, thorough analysis of empirical perception as the one I have just given, which proves all the elements of perception to be subjective, with Fichte's algebraic equations of the *Ego* and the *Non-Ego*; with his sophistical pseudo-demonstrations, which in order to be able to deceive his readers had to be clothed in the obscure, not to say absurd, language adopted by him; with his explanations of the way in which the *Ego* spins the *Non-Ego* out of itself; in short, with all the buffoonery of scientific emptiness.[1] Besides, I protest altogether against any community with this Fichte, as Kant publicly and emphatically did in a notice *ad hoc* in the "Jenaer Litteratur Zeitung."[2] Hegelians and similar ignoramuses may continue to hold forth to their heart's content upon Kant-Fichteian philosophy: there exists a Kantian philosophy and a Fichteian hocus-pocus,—this is the true state of the case, and will remain so, in spite of those who delight in extolling what is bad and in decrying what is good, and of these Germany possesses a larger number than any other country.

---

[1] Compare "Die Welt a. W. u. V." 2nd edition; vol. i. sect. 4, p. 9; and vol. ii. pp. 48, 49 (3rd edition, vol. i. p. 10; vol. ii. p. 52). English translation, vol. i. pp. 9-10; vol. ii. p. 218.

§. 22. *Of the Immediate Object.*

Thus it is from the sensations of our body that we receive the data for the very first application of the causal law, and it is precisely by that application that the perception of this class of objects arises. They therefore have their essence and existence solely in virtue of the intellectual function thus coming into play, and of its exercise.

---

[1] *Wissenschaftsleere* (literally, *emptiness of science*), a pun of Schopenhauer's on the title of Fichte's *Wissenschaftslehre* (*doctrine of science*), which cannot be rendered in English. (Tr.'s Note.)

[2] Kant, "Erklärung über Fichte's Wissenschaftslehre." See the "Intelligenzblatt" of the Jena Literary Gazette (1799), No. 109.

Now, as far as it is the starting-point, *i.e.* the mediator, for our perception of all other objects, I have called the bodily organism, in the first edition of the present work, the *Immediate Object;* this, however, must not be taken in a strictly literal sense. For although our bodily sensations are all apprehended directly, still this immediate apprehension does not yet make our body itself perceptible to us as an object; on the contrary, up to this point all remains subjective, that is to say, sensation. From this sensation certainly proceeds the perception of all other objects as the causes of such sensations, and these causes then present themselves to us as objects; but it is not so with the body itself, which only supplies sensations to consciousness. It is only *indirectly* that we know even this body objectively, *i.e.* as an object, by its presenting itself, like all other objects, as the recognised cause of a subjectively given effect—and precisely on this account *objectively*—in our Understanding, or brain (which is the same). Now this can only take place when its own senses are acted upon by its parts: for instance, when the body is seen by the eye, or felt by the hand, &c., upon which data the brain (or understanding) forthwith constructs it as to shape and quality in space.—The immediate presence in our consciousness of representations belonging to this class, depends therefore upon the position assigned to them in the causal chain—by which all things are *connected*—relatively to the body (for the time being) of the Subject —by which (the Subject) all things are *known.*

§. 23. *Arguments against Kant's Proof of the* à priority *of the conception of Causality.*

One of the chief objects of the "Critique of Pure Reason" is to show the universal validity, for all experience, of the causal law, its *à priority*, and, as a necessary consequence of this, its restriction to possible experience. Nevertheless, I cannot assent to the proof there given of the *à priority* of the principle, which is substantially this:—"The *synthesis* of the manifold by the imagination, which is necessary for all empirical knowledge, gives succession, but not yet determinate succession: that is, it leaves undetermined which of two states perceived was the first, not only in my imagination, but in the object itself. But definite order in this succession—through which alone what we perceive becomes experience, or, in other words, authorizes us to form objectively valid judgments—is first brought into it by the purely intellectual conception of cause and effect. Thus the principle of causal relation is the condition which renders experience possible, and, as such, it is given us *à priori.*"[1]

According to this, the order in which changes succeed each other in real objects becomes known to us as objective only by their causality. This assertion Kant repeats and explains in the "Critique of Pure Reason," especially in his "Second Analogy of Experience,"[2] and again at the conclusion of his "Third Analogy," and I request every one who desires to understand what I am now about to say, to read these passages. In them he affirms everywhere that *the objectivity of the succession of representations*—which he defines as their correspondence with the succession of real objects—is only known through the rule by which they follow upon one another: that is, through the law of causality; that my mere apprehension consequently leaves the objective relation between phenomena following one another quite undetermined: since

---

[1] Kant, "Krit. d. r. Vern." 1st edition, p. 201; 5th edition, p, 246. (English translation by M. Müller, p. 176.) This is, however, not a literal quotation. (Tr.'s note.)

[2] *Ibid.* p. 189 of the 1st edition; more fully, p. 232 of the 5th edition. (English translation by M. Müller, p. 166.)

I merely apprehend the succession of my own representations, but the succession in my apprehension does not authorize me to form any judgment whatever as to the succession in the object, unless that judgment be based upon causality; and since, besides, I might invert the order in which these perceptions follow each other in my apprehension, there being nothing which determines them as objective. To illustrate this assertion, Kant brings forward the instance of a house, whose parts we may consider in any order we like, from top to bottom, or from bottom to top; the determination of succession being in this case purely subjective and not founded upon an object, because it depends upon our pleasure. In opposition to this instance, he brings forward the perception of a ship sailing down a river, which we see successively lower and lower down the stream, which perception of the successively varying positions of the ship cannot be changed by the looker-on. In this latter case, therefore, he derives the subjective following in his own apprehension from the objective following in the phenomenon, and on this account he calls it an *event*. Now I maintain, on the contrary, that *there is no difference at all between these two cases, that both are events*, and that our knowledge of both is objective: that is to say, it is knowledge of changes in real objects recognized as such by the Subject. *Both are changes of relative position in two bodies.* In the first case, one of these bodies is a part of the observer's own organism, the eye, and the other is the house, with respect to the different parts of which the eye successively alters its position. In the second, it is the ship which alters its position towards the stream; therefore the change occurs between two bodies. Both are events, the only difference being that, in the first, the change has its starting-point in the observer's own body, from whose sensations undoubtedly all his perceptions originally proceed, but which is nevertheless an object among objects, and in consequence obeys the laws of the objective, material world. For the observer, as a purely cognising individual, any movement of his body is simply an empirically perceived fact. It would be just as possible in the second as in the first instance, to invert the order of succession in the change, were it as easy for the observer to move the ship up the stream as to alter the direction of his own eyes. For Kant infers the successive perception of different parts of the house to be neither objective nor an event, because it depends upon his own will. But the movement of his eyes in the direction from roof to basement is one event, and in the direction from basement to roof another event, just as much as the sailing of the ship. There is no difference whatever here, nor is there any difference either, as to their being or not being events, between my passing a troop of soldiers and their passing me. If we fix our eyes on a ship sailing close by the shore on which we are standing, it soon seems as if it were the ship that stood still and the shore that moved. Now, in this instance we are mistaken, it is true, as to the cause of the relative change of position, since we attribute it to a wrong cause; the real succession in the relative positions of our body towards the ship is nevertheless quite rightly and objectively recognised by us. Even Kant himself would not have believed that there was any difference, had he borne in mind that his own body was an object among objects, and that the succession in his empirical perceptions depended upon the succession of the impressions received from other objects by his body, and was therefore an objective succession: that is to say, one which takes place among objects *directly* (if not indirectly) and independently of the will of the Subject, and which may therefore be quite well recognised without any causal connection between the objects acting successively on his body.

Kant says, Time cannot be perceived; therefore no succession of representations can be empirically perceived as objective: *i.e.* can be distinguished as changes in phenomena from the changes of mere subjective representations. The causal law, being a rule according to which states follow one another, is the only means by which the objectivity of a change can be known. Now, the result of his assertion would be, that no succession in Time could be perceived by us as objective, excepting that of cause and effect, and that every other succession of phenomena we perceive, would only be determined so, and not otherwise, by our own will. In contradiction to all this I must adduce the fact, that it is quite possible for phenomena to *follow upon* one another without *following from* one another. Nor is the law of causality by any means prejudiced by this; for it remains certain that each change is the effect of another change, this being firmly established *à priori;* only each change not only follows upon the single one which is its cause, but upon all the other changes which occur simultaneously with that cause, and with which that cause stands in no causal connection whatever. It is not perceived by me exactly in the regular order of causal succession, but in quite a different order, which is, however, no less objective on that account, and which differs widely from any subjective succession depending on my caprice, such as, for instance, the pictures of my imagination. The succession, in Time, of events which stand in no causal connection with each other is precisely what we call *contingency*.[1] Just as I am leaving my house, a tile happens to fall from the roof which strikes me; now, there is no causal connection whatever between my going out and the falling of the tile; yet the order of their succession—that is, that my going out preceded the falling of the tile—is objectively determined in my apprehension, not subjectively by my will, by which that order would otherwise have most likely been inverted. The order in which tones follow each other in a musical composition is likewise objectively determined, not subjectively by me, the listener; yet who would think of asserting that musical tones follow one another according to the law of cause and effect? Even the succession of day and night is undoubtedly known to us as an objective one, but we as certainly do not look upon them as causes and effects of one another; and as to their common cause, the whole world was in error till Copernicus came; yet the correct knowledge of their succession was not in the least disturbed by that error. Hume's hypothesis, by the way, also finds its refutation through this; since the following of day and night upon each other—the most ancient of all successions and the one least liable to exception—has never yet misled anyone into taking them for cause and effect of each other.

---

[1] In German *Zufall*, a word derived from the *Zusammenfallen* (falling together), *Zusammentreffen* (meeting together), or coinciding of what is unconnected, just as *τὸ συμβεβηκός* from *συμβαίνειν*. (Compare Aristotle, " Anal. post.," i. 4.)

Elsewhere Kant asserts, that a representation only shows reality (which, I conclude, means that it is distinguished from a mere mental image) by our recognising its necessary connection with other representations subject to rule (the causal law) and its place in a determined order of the time-relations of our representations. But of how few representations are we able to know the place assigned to them by the law of causality in the chain of causes and effects! Yet we are never embarrassed to distinguish objective from subjective representations: real, from imaginary objects. When asleep, we are unable to make this distinction, for our brain is then isolated from the peripherical nervous system, and thereby from external influences. In our dreams therefore, we take imaginary for real things, and it is only when we awaken: that is, when our nervous sensibility, and through this the outer world, once more comes within our consciousness, that we become aware of our mistake; still, even in our dreams, so long as they last, the causal law holds good, only an impossible material is often substituted for the usual one. We might almost think that Kant was influenced by Leibnitz in writing the passage we have quoted, however much he differs from him in all the rest of his philosophy; especially if we consider that Leibnitz expresses precisely similar views, when, for instance, he says: "La vérité des choses sensibles ne consiste que dans la liaison des phénomènes, qui doit avoir sa raison, et c'est ce qui les distingue des songes. — — — — Le vrai Critérion, en matière des objets des sens, est la liaison des phénomènes, qui garantit les vérités de fait, à l'égard des choses sensibles hors de nous."[1]

It is clear that in proving the *à priority* and the necessity of the causal law by the fact that the objective succession of changes is known to us only by means of that law, and that, in so far, causality is a condition for all experience, Kant fell into a very singular error, and one which is indeed so palpable, that the only way we can account for it is, by supposing him to have become so absorbed in the *à priori* part of our knowledge, that he lost sight of what would have been evident to anyone else. The only correct demonstration of the *à priority* of the causal law is given by me in § 21 of the present work. That *à priority* finds its confirmation every moment in the infallible security with which we expect experience to tally with the causal law: that is to say, in the apodeictic certainty we ascribe to it, a certainty which differs from every other founded on induction—the certainty, for instance, of empirically known laws of Nature—in that we can conceive no exception to the causal law anywhere within the world of experience. We can, for instance, *conceive* that in an exceptional case the law of gravitation might cease to act, but not that this could happen without a cause.

---

[1] Leibnitz, "Nouveaux Essais sur l'Entendement," lib. iv. ch. ii. sect. 14.

Kant and Hume have fallen into opposite errors in their proofs. Hume asserts that all *consequence* is mere *sequence;* whereas Kant affirms that all *sequence* must necessarily be *consequence.* Pure Understanding, it is true, can only conceive *consequence* (causal result), and is no more able to conceive mere *sequence* than to conceive the difference between right and left, which, like sequence, is only to be grasped by means of pure Sensibility. Empirical knowledge of the following of events in Time is, indeed, just as possible as empirical knowledge of juxtaposition of things in Space (this Kant denies elsewhere), but *the way in which* things follow *upon* one another in general in Time can no more be explained, than the way in which one thing follows *from* another (as the effect of a cause): the former knowledge is given and conditioned by pure Sensibility; the latter, by pure Understanding. But in asserting that knowledge of the objective succession of phenomena can only be attained by means of the causal law, Kant commits the same error with which he reproaches Leibnitz:[1] that of "intellectualising the forms of Sensibility."—My view of succession is the following one. We derive our knowledge of the bare *possibility* of succession from the form of Time, which belongs to pure Sensibility. The succession of real objects, whose form is precisely Time, we know empirically, consequently as *actual.* But it is through the Understanding alone, by means of Causality, that we gain knowledge of the *necessity* of a succession of two states: that is, of a change; and even the fact that we are able to conceive the necessity of a succession at all, proves already that the causal law is not known to us empirically, but given us *à priori*. The Principle of Sufficient Reason is the general expression for the fundamental form of the necessary connection between all our objects, *i.e.* representations, which lies in the innermost depths of our cognitive faculty: it is the form common to all representations, and the only source of the conception of *necessity*, which contains absolutely nothing else in it and no other import, than that of the following of the consequence, when its reason has been established. Now, the reason why this principle determines the order of succession in Time in the class of representations we are now investigating, in which it figures as the law of causality, is, that Time is the form of these representations, therefore the necessary connection appears here as the rule of succession. In other forms of the principle of sufficient reason, the necessary connection it always demands will appear under quite different forms from that of Time, therefore not as succession; still it always retains the character of a necessary connection, by which the identity of the principle under all its forms, or rather the unity of the root of all the laws of which that principle is the common expression, reveals itself.

---

[1] Kant, "Kritik d. r. Vern." 1st edition, p. 275; 5th edition, p. 331. (English translation by M. Müller, p. 236.)

If Kant's assertion were correct, which I dispute, our only way of knowing the reality of succession would be through its necessity; but this would presuppose an Understanding that embraced all the series of causes and effects at once, consequently an omniscient Understanding. Kant has burdened the Understanding with an impossibility, merely in order to have less need of Sensibility.

How can we reconcile Kant's assertion that our only means of knowing the objective reality of succession is by the necessity with which effect follows cause, with his other assertion[1] that succession in Time is our only empirical criterion for determining which of two states is cause, and which effect. Who does not see the most obvious circle here?

If we knew objectiveness of succession through Causality, we should never be able to think it otherwise than as Causality, and then it would be nothing else than Causality. For, if it were anything else, it would have other distinctive signs by which to be recognised; now this is just what Kant denies. Accordingly, if Kant were right, we could not say: "This state is the effect of that one, wherefore it follows it;" for following and being an effect, would be one and the same thing, and this proposition a tautology. Besides, if we do away with all distinction between following *upon* and following *from*, we once more yield the point to Hume, who declared all consequence to be mere sequence and therefore denied that distinction likewise.

Kant's proof would, consequently, be reduced to this: that, empirically, we only know *actuality* of succession; but as besides we recognise *necessity* of succession in certain series of occurrences, and even know before all experience that every possible occurrence must have a fixed place in some one of these series, the reality and the *à priority* of the causal law follow as a matter of course, the only correct proof of the latter being the one I have given in § 21 of this work.

Parallel with the Kantian theory: that the causal nexus alone renders objective succession and our knowledge of it possible, there runs another: that coexistence and our knowledge of it are only possible through reciprocity. In the "Critique of Pure Reason" they are presented under the title: "Third Analogy of Experience." Here Kant goes so far as to say that "the co-existence of phenomena, which exercise no reciprocal action on one another, but are separated by a perfectly empty space, could never become an object of possible perception"[1] (which, by the way, would be a proof *à priori* that there is no empty space between the fixed stars), and that "the light which *plays between* our eyes and celestial bodies"—an expression conveying surreptitiously the thought, that this starlight not only acts upon our eyes, but is acted upon by them also—"produces an intercommunity between us and them, and proves the co-existence of the latter." Now, even empirically, this last assertion is false; since the sight of a fixed star by no means proves its coexistence simultaneously with its spectator, but, at most, its existence some years, nay even some centuries before. Besides, this second Kantian theory stands and falls with the first, only it is far more easily detected; and the nullity of the whole conception of reciprocity has been shown in § 20.

---

[1] Kant, "Krit. d. r. Vern." vol. i. p. 203 of the 1st edition; p. 249 of the 5th edition. (English translation by M. Müller, p. 178.)

The arguments I have brought forward against Kant's proof may be compared with two previous attacks made on it by Feder,[2] and by G. E. Schulze.[3]

Not without considerable hesitation did I thus venture (in 1813) to attack a theory which had been universally received as a demonstrated truth, is repeated even now in the latest publications,[4] and forms a chief point in the doctrine of one for whose profound wisdom I have the greatest reverence and admiration; one to whom, indeed, I owe so much, that his spirit might truly say to me, in the words of Homer:

---

[1] Kant, "Krit. d. r. Vern." pp. 212 and 213 of the 1st edition. (English translation, pp. 185 and 186.)

[2] Feder, "Ueber Raum und Causalität." sect. 29.

[3] G. E. Schulze, "Kritik der theoretischen Philosophie," vol. ii. p. 422 *sqq.*

[4] For instance, in Fries' "Kritik der Vernunft," vol. ii. p. 85.

> Ἀχλὺν δ' αὖ τοι ἀπ' ὀφθαλμῶν ἕλον, ἣ πρὶν ἐπῆεν.[1]

§ 24. *Of the Misapplication of the Law of Causality.*

From the foregoing exposition it follows, that the application of the causal law to anything but *changes* in the material, empirically given world, is an abuse of it. For instance, it is a misapplication to make use of it with reference to physical forces, without which no changes could take place; or to Matter, *on* which they take place; or to the world, to which we must in that case attribute an absolutely objective existence independently of our intellect; indeed in many other cases besides. I refer the reader to what I have said on this subject in my chief work.[2] Such misapplications always arise, partly, through our taking the conception of cause, like many other metaphysical and ethical conceptions, in far *too wide* a sense; partly, through our forgetting that the causal law is certainly a presupposition which we bring with us into the world, by which the perception of things outside us becomes possible; but that, just on that account, we are not authorized in extending beyond the range and independently of our cognitive faculty a principle, which has its origin in the equipment of that faculty, nor in assuming it to hold good as the everlasting order of the universe and of all that exists.

---

[1] I lifted from thine eyes the darkness which covered them before. (Tr.'s Ad.)

[2] "Die Welt a. W. u. V." 2nd edition, vol. ii. ch. iv. p. 42 *et seqq.*; 3rd edition, vol. ii. p. 46 *et seqq.*

§ 25. *The Time in which a Change takes place.*

As the Principle of Sufficient Reason of Becoming is exclusively applicable to *changes*, we must not omit to mention here, that the ancient philosophers had already raised the question as to the time in which a change takes place, there being no possibility of it taking place during the existence of the preceding state nor after the new one has supervened. Yet, if we assign a special time to it between both states, a body would, during this time, be neither in the first nor in the second state: a dying man, for instance, would be neither alive nor dead; a body neither at rest nor in movement: which would be absurd. The scruples and sophistic subtleties which this question has evoked, may be found collected together in Sextus Empiricus "Adv. Mathem." lib. ix. 267-271, and "Hypat." iii. c. 14; the subject is likewise dealt with by Gellius, l. vi. c. 13—Plato[1] had disposed somewhat cavalierly of this knotty point, by maintaining that changes take place *suddenly* and occupy *no time at all;* they occur, he says, in the *ἐξαίφνης* (*in repentino*), which he calls an *ἄτοπος φύσις, ἐν χρόνῳ οὐδὲν οὖσα*; a strange, timeless existence (which nevertheless comes within Time).

It was accordingly reserved for the perspicacity of Aristotle to clear up this difficult point, which he has done profoundly and exhaustively in the sixth Book of Physics, chap. i.-viii. His proof that no change takes place suddenly (in Plato's *ἐξαίφνης*), but that each occurs only gradually and therefore occupies a certain time, is based entirely upon the pure, *à priori* intuition of Time and of Space; but it is also very subtle. The pith of this very lengthy demonstration may, however, be reduced to the following propositions. When we say of objects that they limit each other, we mean, that both have their extreme ends in common; therefore only two extended things can be conterminous, never two indivisible ones, for then they would be *one*—*i.e.* only lines, but not mere points, can be conterminous. He then transfers this from Space to Time. As there always remains a line between two points, so there always remains a time between two *nows;* this is the time in which a change takes place—*i.e.* when *one* state is in the first, and *another* in the second, *now*. This time, like every other, is divisible to infinity; consequently, whatever is changing passes through an infinite number of degrees within that time, through which the second state gradually grows out of that *first* one.—The process may perhaps be made more intelligible by the following explanation. Between two consecutive states the difference of which is perceptible to our senses, there are always several intermediate states, the difference between which is not perceptible to us; because, in order to be sensuously perceptible, the newly arising state must have reached a certain degree of intensity or of magnitude: it is therefore preceded by degrees of lesser intensity or extension, in passing through which it gradually arises. Taken collectively, these are comprised under the name of *change*, and the time occupied by them is called *the time of change*. Now, if we apply this to a body being propelled, the first effect is a certain vibration of its inner parts, which, after communicating the impulse to other parts, breaks out into external motion.—Aristotle infers quite rightly from the infinite divisibility of Time, that everything which fills it, therefore every change, *i.e.* every passage from one state to another, must likewise be susceptible of endless subdivision, so that all that arises, does so in fact by the concourse of an infinite multitude of parts; accordingly its genesis is always gradual, never sudden. From these principles and the consequent gradual arising of each movement, he draws the weighty inference in the last chapter of this Book, that nothing indivisible, no mere *point* can move. And with this conclusion Kant's definition of Matter, as "that which moves in Space," completely harmonizes.

---

[1] Plato, "Parmenides," p. 138, ed. Bip.

This law of the continuity and gradual taking place of all changes which Aristotle was thus the first to lay down and prove, we find stated three times by Kant: in his "Dissertatio de mundi sensibilis et intelligibilis forma," § 14, in the "Critique of Pure Reason,"[1] and finally in his "Metaphysical First Principles of Natural Science."[2] In all three places his exposition is brief, but also less thorough than that of Aristotle; still, in the main, both entirely agree. We can therefore hardly doubt that, directly or indirectly, Kant must have derived these ideas from Aristotle, though he does not mention him. Aristotle's proposition—*οὐκ ἔστι ἀλλήλων ἐχόμενα τὰ νῦν* ("the moments of the present are not continuous")—we here find expressed as follows: "between two moments there is always a time," to which may be objected that "even between two centuries there is none; because in Time as in Space, there must always be a pure limit."—Thus Kant, instead of mentioning Aristotle, endeavours in the first and earliest of his three statements to identify the theory he is advancing with Leibnitz' *lex continuitatis.* If they really were the same, Leibnitz must have derived his from Aristotle. Now Leibnitz[3] first stated this *Loi de la continuité* in a letter to Bayle.[4] There, however, he calls it *Principe de l'ordre général,* and gives under this name a very general, vague, chiefly geometrical argumentation, having no direct bearing on the time of change, which he does not even mention.

---

[1] Kant, "Krit. d. r. Vern." 1st edition, p. 207; 5th edition, p. 253. (English translation by M. Müller, p. 182.)

[2] Kant, "Metaphysische Anfangsgründe der Naturwissenschaft." End of the "Allgemeine Anmerkung zur Mechanik."

[3] According to his own assertion, p. 189 of the "Opera philos." ed. Erdmann.

[4] *Ibid.* p. 104.

CHAPTER V.

ON THE SECOND CLASS OF OBJECTS FOR THE SUBJECT AND THE FORM OF THE PRINCIPLE OF SUFFICIENT REASON WHICH PREDOMINATES IN IT.

§ 26. *Explanation of this Class of Objects.*

THE only essential distinction between the human race and animals, which from time immemorial has been attributed to a special cognitive faculty peculiar to mankind, called *Reason*, is based upon the fact that man owns a class of representations which is not shared by any animal. These are *conceptions*, therefore *abstract*, as opposed to *intuitive*, representations, from which they are nevertheless derived. The immediate consequence of this is, that animals can neither speak nor laugh; but indirectly all those various, important characteristics which distinguish human from animal life are its consequence. For, through the supervention of abstract representation, motivation has now changed its character. Although human actions result with a necessity no less rigorous than that which rules the actions of animals, yet through this new kind of motivation—so far as here it consists in *thoughts* which render elective decision (*i.e.* a conscious conflict of motives) possible—action with a purpose, with reflection, according to plans and principles, in concert with others, &c. &c., now takes the place of mere impulse given by present, perceptible objects; but by this it gives rise to all that renders human life so rich, so artificial, and so terrible, that man, in this

Western Hemisphere, where his skin has become bleached, and where the primitive, true, profound religions of his first home could not follow him, now no longer recognises animals as his brethren, and falsely believes them to differ fundamentally from him, seeking to confirm this illusion by calling them brutes, giving degrading names to the vital functions which they have in common with him, and proclaiming them outlaws; and thus he hardens his heart against that identity of being between them and himself, which is nevertheless constantly obtruding itself upon him.

Still, as we have said, the whole difference lies in this—that, besides the intuitive representations examined in the last chapter, which are shared by animals, other, abstract representations derived from these intuitive ones, are lodged in the human brain, which is chiefly on this account so much larger than that of animals. Representations of this sort have been called *conceptions*,[1] because each comprehends innumerable individual things in, or rather under, itself, and thus forms a complex.[2] We may also define them as *representations drawn from representations.* For, in forming them, the faculty of abstraction decomposes the complete, intuitive representations described in our last chapter into their component parts, in order to think each of these parts separately as the different qualities of, or relations between, things. By this process, however, the representations necessarily forfeit their perceptibility; just as water, when decomposed, ceases to be fluid and visible. For although each quality thus isolated (abstracted) can quite well be *thought* by itself, it does not at all follow that it can be *perceived* by itself. We form conceptions by dropping a good deal of what is given us in perception, in order to be able to think the rest by itself. To conceive therefore, is to think less than we perceive. If, after considering divers objects of perception, we drop something different belonging to each, yet retain what is the same in all, the result will be the *genus* of that species. The generic conception is accordingly always the conception of every species comprised under it, after deducting all that does not belong to *every* species. Now, as every possible conception may be thought as a *genus*, a conception is always something general, and as such, not perceptible. Every conception has on this account also its *sphere*, as the sum-total[1] of what may be thought under it. The higher we ascend in abstract thought, the more we deduct, the less therefore remains to be thought. The highest, *i.e.* the most general conceptions, are the emptiest and poorest, and at last become mere husks, such as, for instance, being, essence, thing, becoming, &c. &c.—Of what avail, by the way, can philosophical systems be, which are only spun out of conceptions of this sort and have for their substance mere flimsy husks of thoughts like these? They must of necessity be exceedingly empty, poor, and therefore also dreadfully tiresome.

---

[1] *Begriff*, *comprehensive* thought, derived from *begreifen*, to comprehend. [Tr.]

[2] *Inbegriff*, comprehensive totality. [Tr.]

Now as representations, thus sublimated and analysed to form abstract conceptions, have, as we have said, forfeited all perceptibility, they would entirely escape our consciousness, and be of no avail to it for the thinking processes to which they are destined, were they not fixed and retained in our senses by arbitrary signs. These signs are words. In as far as they constitute the contents of dictionaries and therefore of language, words always designate *general* representations, conceptions, never perceptible objects; whereas a lexicon which enumerates individual things, only contains proper names, not words, and is either a geographical or historical dictionary: that is to say, it enumerates what is separated either by Time or by Space; for, as *my* readers know, Time and Space are the *principium individuationis.* It is only because animals are limited to intuitive representations and incapable of any abstraction—incapable therefore of forming conceptions—that they are without language, even when they are able to articulate words; whereas they understand proper names. That it is this same defect which excludes them from laughter, I have shown in my theory of the ridiculous.[1]

---

[1] *Inbegriff.*

On analyzing a long, continuous speech made by a man of no education, we find in it an abundance of logical forms, clauses, turns of phrase, distinctions, and subtleties of all sorts, correctly expressed by means of grammatical forms with their inflections and constructions, and even with a frequent use of the *sermo obliquus*, of the different moods, &c. &c., all in conformity with rule, which astonishes us, and in which we are forced to recognise an extensive and perfectly coherent knowledge. Still this knowledge has been acquired on the basis of the perceptible world, the reduction of whose whole essence to abstract conceptions is the fundamental business of the Reason, and can only take place by means of language. In learning the use of language therefore, the whole mechanism of Reason—that is, all that is essential in Logic—is brought to our consciousness. Now this can evidently not take place without considerable mental effort and fixed attention, for which the desire to learn gives children the requisite strength. So long as that desire has before it what is really available and necessary, it is vigorous, and it only appears weak when we try to force upon children that which is not suited to their comprehension. Thus even a coarsely educated child, in learning all the turns and subtleties of language, as well through its own conversation as that of others, accomplishes the development of its Reason, and acquires that really concrete Logic, which consists less in logical rules than in the proper application of them; just as the rules of harmony are learnt by persons of musical talent simply by playing the piano, without reading music or studying thorough-bass.—The deaf and dumb alone are excluded from the above-mentioned logical training through the acquirement of speech; therefore they are almost as unreasonable as animals, when they have not been taught to read by the very artificial means specially adapted for their requirements, which takes the place of the natural schooling of Reason.

---

[1] See "Die Welt a. W. u. V." vol. i. sect. 13, and vol. ii. ch. 8.

§ 27. *The Utility of Conceptions.*

The fundamental essence of our Reason or thinking faculty is, as we have seen, the power of abstraction, or the faculty of forming *conceptions:* it is therefore the presence of these in our consciousness which produces such amazing results. That it should be able to do this, rests mainly on the following grounds.

It is just because they contain less than the representations from which they are drawn, that conceptions are easier to deal with than representations; they are, in fact, to these almost as the formula of higher arithmetic to the mental operations which give rise to them and which they represent, or as a logarithm to its number. They only contain just the part required of the many representations from which they are drawn; if instead we were to try to recall those representations themselves by means of the imagination, we should, as it were, have to lug about a load of unessential lumber, which would only embarrass us; whereas, by the help of conceptions, we are enabled to think only those parts and relations of all these representations which are wanted for each individual purpose: so that their employment may be compared to doing away with superfluous luggage, or to working with extracts instead of plants themselves—with quinine, instead of bark. What is properly called *thinking*, in its narrowest sense, is the occupation of the intellect with conceptions: that is, the presence in our consciousness of the class of representations we now have before us. This is also what we call *reflection:* a word which, by a figure of speech borrowed from Optics, expresses at once the derivative and the secondary character of this kind of knowledge. Now it is this thinking, this reflection, which gives man that *deliberation*, which is wanting in animals. For, by enabling him to think many things under one conception, but always only the essential part in each of them, it allows him to drop at his pleasure every kind of distinction, consequently even those of Time and of Space, and thus he acquires the power of embracing in thought, not only the past and the future, but also what is absent; while animals are in every respect strictly bound to the present. This deliberative faculty again is really the root of all those theoretical and practical achievements which give man so great a superiority over animals; first and foremost, of his care for the future while taking the past into consideration; then of his premeditated, systematic, methodical procedure in all undertakings, and therefore of the co-operation of many persons towards a common end, and, by this, of law, order, the State, &c. &c.—But it is especially in Science that the use of conceptions is important; for they are, properly speaking, its materials. The aims of all the sciences may, indeed, in the last resort, be reduced to knowledge of the particular through the general; now this is only possible by means of the *dictum de omni et nullo*, and this, again, is only possible through the existence of conceptions. Aristotle therefore says: ἄνευ μὲν γὰρ τῶν καθόλου οὐκ ἔστιν ἐπιστήμην λαβεῖν[1] (*absque universalibus enim non datur scientia*). Conceptions are precisely those *universalia*, whose mode of existence formed the argument of the long controversy between the Realists and Nominalists in the Middle Ages.

§ 28. *Representatives of Conceptions. The Faculty of Judgment.*

Conceptions must not be confounded with pictures of the imagination, these being intuitive and complete, therefore individual representations, although they are not called forth by sensuous impressions and do not therefore belong to the complex of experience. Even when used to *represent a conception*, a picture of the imagination (phantasm) ought to be distinguished from a conception. We use phantasms as *representatives of conceptions* when we try to grasp the intuitive representation itself that has given rise to the conception and to make it tally with that conception, which is in all cases impossible; for there is no representation, for instance, of dog in general, colour in general, triangle in general, number in general, nor is there any picture of the imagination which corresponds to these conceptions. Then we evoke the phantasm of some dog or other, which, as a representation, must in all cases be determined: that is, it must have a certain size, shape, colour, &c. &c.; even though the conception represented by it has no such determinations. When we use such *representatives of conceptions* however, we are always conscious that they are not adequate to the conceptions they represent, and that they are full of arbitrary determinations. Towards the end of the first part of his

---

[1] Aristot. "Metaph." xii. c. 9, "For without universals it is impossible to have knowledge." (Tr.'s Add.)

Twelfth Essay on Human Understanding, Hume expresses himself in agreement with this view, as also Rousseau in his "Discours sur l'Origine de l'Inégalité."[1] Kant's doctrine, on the contrary, is a totally different one. The matter is one which introspection and clear reflection can alone decide. Each of us must therefore examine himself as to whether he is conscious in his own conceptions of a "Monogram of Pure Imagination *à priori*;" whether, for instance, when he thinks dog, he is conscious of something *entre chien et loup*; or whether, as I have here explained it, he is either thinking an abstract conception through his Reason, or representing some representative of that conception as a complete picture through his imagination.

All thinking, in a wider sense: that is, all inner activity of the mind in general, necessitates either words or pictures of the imagination: without one or other of these it has nothing to hold by. They are not, however, both necessary at the same time, although they may co-operate to their mutual support. Now, thinking in a narrower sense—that is, abstract reflection by means of words—is either purely logical reasoning, in which case it keeps strictly to its own sphere; or it touches upon the limits of perceptible representations in order to come to an understanding with them, so as to bring that which is given by experience and grasped by perception into connection with abstract conceptions resulting from clear reflection, and thus to gain complete possession of it. In thinking therefore, we seek either for the conception or rule to which a given perception belongs, or for the particular case which proves a given conception or rule. In this quality, thinking is an activity of the *faculty of judgment*, and indeed in the first case a reflective, in the second, a subsuming activity. The faculty of judgment is accordingly the mediator between intuitive and abstract knowledge, or between the Underderstanding and the Reason. In most men it has merely rudimentary, often even merely nominal existence;[1] they are destined to follow the lead of others, and it is as well not to converse with them more than is necessary.

---

[1] Part the First, in the middle.

The true kernel of all knowledge is that reflection which works with the help of intuitive representations; for it goes back to the fountain-head, to the basis of all conceptions. Therefore it generates all really original thoughts, all primary and fundamental views and all inventions, so far as chance had not the largest share in them. *The Understanding* prevails in this sort of thinking, whilst *the Reason* is the chief factor in purely abstract reflection. Certain thoughts which wander about for a long time in our heads, belong to this sort of reflection: thoughts which come and go, now clothed in one kind of intuition, now in another, until they at last become clear, fix themselves in conceptions and find words to express them. Some, indeed, never find words to express them, and these are, unfortunately, the best of all: *quæ voce meliora sunt*, as Apuleius says.

Aristotle, however, went too far in thinking that no reflection is possible without pictures of the imagination. Nevertheless, what he says on this point,[2] *οὐδέποτε νοεῖ ἄνευ φαντάσματος ἡ ψυχή* (*anima sine phantasmate nunquam intelligit*),[3] and *ὅταν θεωρῇ, ἀνάγκη ἅμα φάντασμά τι θεωρεῖν* (*qui contemplatur, necesse est, una cum phantasmate contempletur*),[4] and again, *νοεῖν οὐκ ἔστι ἄνευ φαντάσματος* (*fieri non potest, ut sine phantasmate quidquam intelli-*

---

[1] Let any one to whom this assertion may appear hyperbolical, consider the fate of Göthe's "Theory of Colours" (*Farbenlehre*), and should he wonder at my finding a corroboration for it in that fate, he will himself have corroborated it a second time.

[2] Aristot. "De anima," iii. c. c. 3, 7, 8.

[3] "The mind never thinks without (the aid of) an image." [Tr.]

[4] "He who observes anything must observe some image along with it." [Tr.]

gatur),[1]—made a strong impression upon the thinkers of the fifteenth and sixteenth centuries, who therefore frequently and emphatically repeat what he says. Pico della Mirandola,[2] for instance, says: *Necesse est, eum, qui ratiocinatur et intelligit, phantasmata speculari;*—Melanchthon[3] says: *Oportet intelligentem phantasmata speculari;*—and Jord. Brunus[4] says, *dicit Aristoteles: oportet scire volentem, phantasmata speculari.* Pomponatius[5] expresses himself in the same sense.—On the whole, all that can be affirmed is, that every true and primary notion, every genuine philosophic theorem even, must have some sort of intuitive view for its innermost kernel or root. This, though something momentary[6] and single, subsequently imparts life and spirit to the whole analysis, however exhaustive it may be,—just as one drop of the right reagent suffices to tinge a whole solution with the colour of the precipitate which it causes. When an analysis has a kernel of this sort, it is like a bank note issued by a firm which has ready money wherewith to back it; whereas every other analysis proceeding from mere combinations of abstract conceptions, resembles a bank note which is issued by a firm which has nothing but other paper obligations to back it with. All mere rational talk thus renders the result of given conceptions clearer, but does not, strictly speaking, bring anything new to light. It might therefore be left to each individual to do himself, instead of filling whole volumes every day.

§ 29. *Principle of Sufficient Reason of Knowing.*

But, even in a narrower sense, thinking does not consist in the bare presence of abstract conceptions in our consciousness, but rather in connecting or separating two or more of these conceptions under sundry restrictions and modifications which Logic indicates in the Theory of Judgments. A relation of this sort between conceptions distinctly thought and expressed we call a *judgment*. Now, with reference to these judgments, the Principle of Sufficient Reason here once more holds good, yet in a widely different form from that which has been explained in the preceding chapter; for here it appears as the Principle of Sufficient Reason of Knowing, *principium rationis sufficientis cognoscendi*. As such, it asserts that if a *judgment* is to express *knowledge* of any kind, it must have a sufficient reason: in virtue of which quality it then receives the predicate *true*. Thus *truth* is the reference of a judgment to something different from itself, called its reason or ground, which reason, as we shall presently see, itself admits of a considerable variety of kinds. As, however, this reason is invariably a something upon which the judgment rests, the German term for it, viz., *Grund*, is not ill chosen. In Latin, and in all languages of Latin origin, the word by which a reason of knowledge is designated, is the same as that used for the faculty of Reason (*ratiocinatio*): both are called *ratio, la ragione, la razon, la raison, the reason*. From this it is evident, that attaining knowledge of the reasons of judgments had been recognised as Reason's highest function, its business κατ' ἐξοχήν. Now, these grounds upon which a judgment may rest, may be divided into *four* different kinds, and the truth obtained by that judgment will correspondingly differ. They are stated in the following paragraph.

---

[1] "De Memoria," c. 1: "It is impossible to think without (the aid of) an image."

[2] "De imaginatione," c. 5.

[3] "De anima," p. 130.

[4] "De compositione imaginum," p. 10.

[5] "De immortalitate," pp. 54 et 70.

[6] "*Ein Momentanes und Einheitliches.*"

§ 30. *Logical Truth.*

A judgment may have for its reason another judgment; in this case it has *logical* or *formal* truth. Whether it has material truth also, remains an open question and depends on whether the judgment on which it rests has material truth, or whether the series of judgments on which it is founded leads to a judgment which has material truth, or not. This founding of a judgment upon another judgment always originates in a comparison between them which takes place either directly, by mere conversion or contraposition, or by adding a third judgment, and then the truth of the judgment we are founding becomes evident through their mutual relation. This operation is the complete *syllogism*. It is brought about either by the opposition or by the subsumption of conceptions. As the syllogism, which is the founding of one judgment upon another by means of a third, never has to do with anything but judgments; and as judgments are only combinations of conceptions, and conceptions again are the exclusive object of our Reason: syllogizing has been rightly called Reason's special function. The whole syllogistic science, in fact, is nothing but the sum-total of the rules for applying the principle of sufficient reason to the mutual relations of judgments; consequently it is the canon of *logical truth*.

Judgments, whose truth becomes evident through the four well-known laws of thinking, must likewise be regarded as based upon other judgments; for these four laws are themselves precisely judgments, from which follows the truth of those other judgments. For instance, the judgment: "A triangle is a space enclosed within three lines," has for its last reason the Principle of Identity, that is to say, the thought expressed by that principle. The judgment, "No body is without extension," has for its last reason the Principle of Contradiction. This again, "Every judgment is either true or untrue," has for its last reason the Principle of the Excluded Middle; and finally, "No one can admit anything to be true without knowing why," has for its last reason the Principle of Sufficient

Reason of Knowing. In the general employment of our Reason, we do not, it is true, before admitting them to be true, reduce judgments which follow from the four laws of thinking to their last reasons, as premisses; for most men are even ignorant of the very existence of these abstract laws. The dependence of such judgments upon them, as their premisses, is however no more diminished by this, than the dependence of the first judgment upon the second, as its premiss, is diminished by the fact, that it is not at all necessary for the principle, "all bodies incline towards the centre of the earth," to be present in the consciousness of any one who says, "this body will fall if its support is removed." That in Logic, therefore, *intrinsic truth* should hitherto have been attributed to all judgments founded exclusively on the four laws of thinking: that is to say, that these judgments should have been pronounced *directly true*, and that this *intrinsic logical truth* should have been distinguished from *extrinsic logical truth*, as attributed to all judgments which have another judgment for their reason, I cannot approve. Every truth is the reference of a judgment to something *outside* of it, and the term *intrinsic truth* is a contradiction.

§ 31. *Empirical Truth.*

A judgment may be founded upon a representation of the first class, *i.e.* a perception by means of the senses, consequently on experience. In this case it has *material truth*, and moreover, if the judgment is founded *immediately* on experience, this truth is *empirical truth*.

When we say, "A judgment has *material truth*," we mean on the whole, that its conceptions are connected, separated, limited, according to the requirements of the intuitive representations through which it is inferred. To attain knowledge of this, is the direct function of the *faculty of judgment*, as the mediator between the intuitive and the abstract or discursive faculty of knowing—in other words, between the Understanding and the Reason.

§ 32. *Transcendental Truth.*

The *forms* of intuitive, empirical knowledge which lie within the Understanding and pure Sensibility may, as conditions of all possible experience, be the grounds of a judgment, which is in that case synthetical *à priori*. As nevertheless this kind of judgment has material truth, its truth is *transcendental;* because the judgment is based not only on experience, but on the conditions of all possible experience lying within us. For it is determined precisely by that which determines experience itself: namely, either by the forms of Space and of Time perceived by us *à priori*, or by the causal law, known to us *à priori*. Propositions such as: two straight lines do not include a space; nothing happens without a cause; matter can neither come into being nor perish; 3 × 7 = 21, are examples of this kind of judgment. The whole of pure Mathematics, and no less my tables of the *Prædicabilia à priori*,[1] as well as most of Kant's theorems in his "Metaphysische Anfangsgründe der Naturwissenschaft," may, properly speaking, be adduced in corroboration of this kind of truth.

§. 33. *Metalogical Truth.*

Lastly, a judgment may be founded on the formal conditions of all thinking, which are contained in the Reason; and in this case its truth is of a kind which seems to me best defined as *metalogical truth*. This expression has nothing at all to do with the "Metalogicus" written by Johannes

---

[1] See "Die Welt a. W. u. V." 3rd edition, vol. ii. ch. iv. p. 55.

Sarisberriensis in the twelfth century, for he declares in his prologue, "*quia Logicæ suscepi patrocinium, Metalogicus inscriptus est liber,*" and never makes use of the word again. There are only four metalogically true judgments of this sort, which were discovered long ago by induction, and called the laws of all thinking; although entire uniformity of opinion as to their expression and even as to their number has not yet been arrived at, whereas all agree perfectly as to what they are on the whole meant to indicate. They are the following:—

1. A subject is equal to the sum total of its predicates, or a = a.

2. No predicate can be attributed and denied to a subject at the same time, or a = —a = o.

3. One of two opposite, contradictory predicates must belong to every subject.

4. Truth is the reference of a judgment to something outside of it, as its sufficient reason.

It is by means of a kind of reflection which I am inclined to call Reason's self-examination, that we know that these judgments express the conditions of all thinking, and therefore have these conditions for their reason. For, by the fruitlessness of its endeavours to think in opposition to these laws, our Reason acknowledges them to be the conditions of all possible thinking: we then find out, that it is just as impossible to think in opposition to them, as it is to move the members of our body in a contrary direction to their joints. If it were possible for the subject to know itself, these laws would be known to us *immediately*, and we should not need to try experiments with them on objects, *i.e.* representations. In this respect it is just the same with the reasons of judgments which have transcendental truth; for they do not either come into our consciousness immediately, but only in *concreto*, by means of objects, *i.e.* of representations. In endeavouring, for instance, to conceive a change without a preceding cause, or a passing into or out of being of Matter, we become aware that it is impossible; moreover we recognise this impossibility to be an objective one, although its root lies in our intellect: for we could not otherwise bring it to consciousness in a subjective way. There is, on the whole, a strong likeness and connection between transcendental and metalogical truths, which shows that they spring from a common root. In this chapter we see the Principle of Sufficient Reason chiefly as metalogical truth, whereas in the last it appeared as transcendental truth and in the next one it will again be seen as transcendental truth under another form. In the present treatise I am taking special pains, precisely on this account, to establish the Principle of Sufficient Reason as a judgment having a fourfold reason; by which I do not mean four different reasons leading contingently to the same judgment, but one reason presenting itself under a fourfold aspect: and this is what I call its Fourfold Root. The other three metalogical truths so strongly resemble one another, that in considering them one is almost necessarily induced to search for their common expression, as I have done in the Ninth Chapter of the Second Volume of my chief work. On the other hand, they differ considerably from the Principle of Sufficient Reason. If we were to seek an analogue for the three other metalogical truths among transcendental truths, the one I should choose would be this: Substance, I mean Matter, is permanent.

§ 34. *Reason.*

As the class of representations I have dealt with in this chapter belongs exclusively to Man, and as all that distinguishes human life so forcibly from that of animals and confers so great a superiority on man, is, as we have shown, based upon his faculty for these representations, this faculty evidently and unquestionably constitutes that Reason, which from time immemorial has been reputed the prerogative of mankind. Likewise all that has been considered by all nations and in all times explicitly as the work or manifestation of the Reason, of the λόγος, λόγιμον, λογιστικόν, *ratio*, *la ragione*, *la razon*, *la raison*, *reason*, may evidently also be reduced to what is only possible for abstract, discursive, reflective, mediate knowledge, conditioned by words, and not for mere intuitive, immediate, sensuous knowledge, which belongs to animals also. Cicero rightly places *ratio et oratio* together,[1] and describes them as *quæ docendo, discendo, communicando, disceptando, judicando, conciliat inter se homines*, &c. &c., and [2] *rationem dico, et, si placet, pluribus verbis, mentem, consilium, cogitationem, prudentiam*. And [3] *ratio, qua una præstamus beluis, per quam conjectura valemus, argumentamur, refellimus, disserimus, conficimus aliquid, concludimus*. But, in all ages and countries, philosophers have invariably expressed themselves in this sense with respect to the Reason, even to Kant himself, who still defines it as the faculty for principles and for inference; although it cannot be denied that he first gave rise to the distorted views which followed. In my principal work,[4] and also in the Fundamental Problems of Ethics, I have spoken at great length about the agreement of all philosophers on this point, as well as about the true nature of Reason, as opposed to the distorted conceptions for which we have to thank the professors of philosophy of this century. I need not therefore repeat what has already been said there, and shall limit myself to the following considerations.

---

[1] Cicer. "De Offic." i. 16.

[2] *Idem*, "De nat. deor." ii. 7.

[3] *Idem*, "De Leg." i. 10.

[4] See "Die Welt a. W. u. V." 2nd edition, vol. i. § 8, and also in the Appendix, pp. 577-585 (3rd edition, pp. 610-620), and again vol. ii. ch. vi.; finally "Die b. G-P. d. Ethik," pp. 148-154 (2nd edition, pp. 146-151).

Our professors of philosophy have thought fit to do away with the name which had hitherto been given to that faculty of thinking and pondering by means of reflection and conceptions, which distinguishes man from animals, which necessitates language while it qualifies us for its use, with which all human deliberation and all human achievements hang together, and which had therefore always been viewed in this light and understood in this sense by all nations and even by all philosophers. In defiance of all sound taste and custom, our professors decided that this faculty should henceforth be called *Understanding* instead of *Reason*, and that all that is derived from it should be named *intelligent* instead of *rational*, which, of course, had a strange, awkward ring about it, like a discordant tone in music. For in all ages and countries the words *understanding*, *intellectus*, *acumen*, *perspicacia*, *sagacitas*, &c. &c., had been used to denote the more intuitive faculty described in our last chapter; and its results, which differ specifically from those of Reason here in question, have always been called *intelligent*, *sagacious*, *clever*, &c. &c. *Intelligent* and *rational* were accordingly always distinguished one from the other, as manifestations of two entirely and widely different mental faculties. Our professional philosophers could not, however, take this into account; their policy required the sacrifice, and in such cases the cry is: "Move on, truth; for we have higher, well-defined aims in view! Make way for us, truth, *in majorem Dei gloriam*, as thou hast long ago learnt to do! Is it thou who givest fees and pensions? Move on, truth, move on; betake thyself to merit and crouch in the corner!" The fact was, they wanted Reason's place and name for a faculty of their own creation and fabrication, or to speak more correctly and honestly, for a completely fictitious faculty, destined to help them out of the straits to which Kant had reduced them; a faculty for direct, metaphysical knowledge: that is to say, one which transcends all possible experience, is able to grasp the world of things in themselves and their relations, and is therefore, before all, consciousness of God (*Gottesbewusstsein*): that is, it knows God the Lord immediately, construes *à priori* the way in which he has created the Universe, or, should this sound too trivial, the way in which he has produced it out of himself, or to a certain degree generated it by some more or less necessary vital process, or again—as the most convenient proceeding, however comical it may appear—simply "dismissed" it, according to the custom of sovereigns at the end of an audience, and left it to get upon its legs by itself and walk away wherever it liked. Nothing less than the impudence of a scribbler of nonsense like Hegel, could, it is true, be found to venture upon this last step. Yet it is tom-foolery like this which, largely amplified, has filled hundreds of volumes for the last fifty years under the name of cognitions of Reason (*Vernunfterkenntnisse*), and forms the argument of so many works called philosophical by their authors, and scientific by others—one would think ironically—this expression being even repeated to satiety. *Reason*, to which all this wisdom is falsely and audaciously imputed, is pronounced to be a "supersensuous faculty," or a faculty "for ideas;" in short, an oracular power lying within us, designed directly for Metaphysics. During the last half-century, however, there has been considerable discrepancy of opinion among the adepts as to the way in which all these supersensuous wonders are perceived. According to the most audacious, Reason has a direct intuition of the Absolute, or even *ad libitum* of the Infinite and of its evolutions towards the Finite. Others, somewhat less bold, opine that its mode of receiving this information partakes rather of audition than of vision; since it does not exactly see, but merely *hears* (*vernimmt*), what is going on in "cloud-cuckoo-land" (*νεφελοκοκκυγία*), and then honestly transmits what it has thus received to the Understanding, to be worked up into text-books. According to a pun of Jacobi's, even the German name for Reason, "*Vernunft*," is derived from this pretended "*Vernehmen*;" whereas it evidently comes from that "*Vernehmen*" which is conveyed by language and conditioned by Reason, and by which the distinct perception of words and their meaning is designated, as opposed to mere sensuous hearing which animals have also. This miserable *jeu de mots* nevertheless continues, after half a century, to find favour; it passes for a serious thought, nay even for a proof, and has been repeated over and over again. The most modest among the adepts again assert, that Reason neither sees nor hears, therefore it receives neither a vision nor a report of all these wonders, and has a mere vague *Ahndung*, or misgiving of them; but then they drop the *d*, by which the word (*Ahnung*) acquires a peculiar touch of silliness, which, backed up as it is by the sheepish look of the apostle for the time being of this wisdom, cannot fail to gain it entrance.

My readers know that I only admit the word *idea* in its primitive, that is Platonic, sense, and that I have treated this point at length and exhaustively in the Third Book of my chief work. The French and English, on the other hand, certainly attach a very commonplace, but quite clear and definite meaning to the word *idée*, or *idea*; whereas the Germans lose their heads as soon as they hear the word *Ideen*;[1] all presence of mind abandons them, and they feel as if they were about to ascend in a balloon. Here therefore was a field of action for our adepts in intellectual intuition; so the most impudent of them, the notorious *charlatan*

---

[1] Here Schopenhauer adds, "especially when pronounced *Uedähen*." [Tr.]

Hegel, without more ado, called his theory of the universe and of all things "*Die Idee*," and in this of course all thought that they had something to lay hold of. Still, if we inquire into the nature of these *ideas* for which Reason is pronounced to be the faculty, without letting ourselves be put out of countenance, the explanation usually given is an empty, high-flown, confused verbiage, in set periods of such length, that if the reader does not fall asleep before he has half read it, he will find himself bewildered rather than enlightened at the end; nay, he may even have a suspicion that these ideas are very like chimæras. Meanwhile, should anyone show a desire to know more about this sort of ideas, he will have all kinds of things served up to him. Now it will be the chief subjects of the theses of Scholasticism—I allude here to the representations of God, of an immortal Soul, of a real, objectively existent World and its laws—which Kant himself has unfortunately called Ideas of Reason, erroneously and unjustifiably, as I have shown in my Critique of his philosophy, yet merely with a view to proving the utter impossibility of demonstrating them and their want of all theoretical authority. Then again it will be, as a variation, only God, Freedom, and Immortality; at other times it will be the Absolute, whose acquaintance we have already made in § 20, as the Cosmological Proof, forced to travel incognito; or the Infinite as opposed to the Finite; for, on the whole, the German reader is disposed to content himself with such empty talk as this, without perceiving that the only clear thought he can get out of it is, 'that which has an end' and 'that which has none.' 'The Good, the True, and the Beautiful,' moreover, stand high in favour with the sentimental and tender-hearted as pretended *ideas*, though they are really only three very wide and abstract conceptions, because they are extracted from a multitude of things and relations; wherefore, like many other such *abstracta*, they are exceedingly empty. As regards their contents, I have shown above (§ 29) that Truth is a quality belonging exclusively to judgments: that is, a logical quality; and as to the other two *abstracta*, I refer my readers partly to § 65 of the first volume, partly to the entire Third Book of my chief work. If, nevertheless, a very solemn and mysterious air is assumed and the eyebrows are raised up to the wig whenever these three meagre *abstracta* are mentioned, young people may easily be induced to believe that something peculiar and inexpressible lies behind them, which entitles them to be called *ideas*, and harnessed to the triumphal car of this would-be metaphysical Reason.

When therefore we are told, that we possess a faculty for direct, material (*i.e.*, not only formal, but substantial), supersensuous knowledge, (that is, a knowledge which transcends all possible experience), a faculty specially designed for metaphysical insight, and inherent in us for this purpose—I must take the liberty to call this a downright lie. For the slightest candid self-examination will suffice to convince us that absolutely no such faculty resides within us. The result at which all honest, competent, authoritative thinkers have arrived in the course of ages, moreover, tallies exactly with my assertion. It is as follows: All that is innate in the whole of our cognitive faculty, all that is therefore *à priori* and independent of experience, is strictly limited to the *formal* part of knowledge: that is, to the consciousness of the peculiar functions of the intellect and of the only way in which they can possibly act; but in order to give material knowledge, these functions one and all require material from outside. Within us therefore lie the forms of external, objective perception: Time and Space, and then the law of Causality—as a mere form of the Understanding which enables it to construct the objective, corporeal world—finally, the formal part of abstract knowledge: this last is deposited and treated of in *Logic*, which our forefathers therefore rightly called the *Theory of Reason.* But this very Logic teaches us also, that the *conceptions* which constitute those judgments and conclusions to which all logical laws refer, must look to *intuitive* knowledge for their *material* and their *content;* just as the Understanding, which creates *this intuitive knowledge,* looks to sensation for the material which gives content to its *à priori* forms.

Thus all that is *material* in our knowledge: that is to say, all that cannot be reduced to subjective *form,* to individual mode of activity, to functions of our intellect,—its whole *material* therefore,—comes from outside; that is, in the last resort, from the objective perception of the corporeal world, which has its origin in sensation. Now it is this intuitive and, so far as material content is concerned, empirical knowledge, which *Reason—real* Reason—works up into conceptions, which it fixes sensuously by means of words; these conceptions then supply the materials for its endless combinations through judgments and conclusions, which constitute the weft of our thought-world. *Reason* therefore has absolutely no *material,* but merely a *formal,* content, and this is the object-matter of Logic, which consequently contains only forms and rules for thinking operations. In reflecting, Reason is absolutely forced to take its material contents from outside, *i.e.,* from the intuitive representations which the Understanding has created. Its functions are exercised on them, first of all, in forming *conceptions,* by dropping some of the various qualities of things while retaining others, which are then connected together to a conception. Representations, however, forfeit their capacity for being intuitively perceived by this process, while they become easier to deal with, as has already been shown. It is therefore in this, and in this alone, that the efficiency of Reason consists; whereas it can never supply *material content from its own resources.*—It has nothing but forms: its nature is feminine; it only conceives, but does not generate. It is not by mere chance that the Reason is feminine in all Latin, as well as Teutonic, languages; whereas the Understanding is invariably masculine.

In using such expressions as 'sound Reason teaches this,' or 'Reason should control passion,' we by no means imply that Reason furnishes material knowledge out of its own resources; but rather do we point to the results of rational reflection, that is, to logical inference from principles which abstract knowledge has gradually gathered from experience and by which we obtain a clear and comprehensive view, not only of what is empirically necessary, and may therefore, the case occurring, be foreseen, but even of the reasons and consequences of our own deeds also. *Reasonable* or *rational* is everywhere synonymous with *consistent* or *logical*, and conversely; for Logic is only Reason's natural procedure itself, expressed in a system of rules; therefore these expressions (rational and logical) stand in the same relation to one another as theory and practice. Exactly in this same sense too, when we speak of a reasonable conduct, we mean by it one which is quite consistent, one therefore which proceeds from general conceptions, and is not determined by the transitory impression of the moment. By this, however, the morality of such conduct is in no wise determined: it may be good or bad indifferently. Detailed explanations of all this are to be found in my "Critique of Kant's Philosophy,"[1] and also in my "Fundamental Problems of Ethics."[2] Notions derived from *pure Reason* are, lastly, those which have their source in the *formal* part, whether intuitive or reflective, of our cognitive faculty; those, consequently, which we are able to bring to our consciousness *à priori*, that is, without the help of experience. They are invariably based upon principles which have transcendental or metalogical truth.

---

[1] "Die Welt a. W. u. V." 2nd edition, vol. i. p. 576 *et seqq.*; 3rd edition, p. 610 *et seq.*

[2] Schopenhauer, "Die beiden Grundprobleme der Ethik," p. 152; 2nd edition, p. 149 *et seq.*

A Reason, on the other hand, which supplies material knowledge primarily out of its own resources and conveys positive information transcending the sphere of possible experience; a Reason which, in order to do this, must necessarily contain *innate ideas*, is a pure fiction, invented by our professional philosophers and a product of the terror with which Kant's Critique of Pure Reason has inspired them. I wonder now, whether these gentlemen know a certain Locke and whether they have ever read his works? Perhaps they may have done so in times long gone by, cursorily and superficially, while looking down complacently on this great thinker from the heights of their own conscious superiority: may be, too, in some inferior German translation; for I do not yet see that the knowledge of modern languages has increased in proportion to the deplorable decrease in that of ancient ones. How could time besides be found for such old croakers as Locke, when even a real, thorough knowledge of Kant's Philosophy at present hardly exists excepting in a very few, very old heads? The youth of the generation now at its maturity had of course to be spent in the study of "Hegel's gigantic mind," of the "sublime Schleiermacher," and of the "acute Herbart." Alas! alas! the great mischief in academical hero-worship of this sort, and in the glorification of university celebrities by worthy colleagues in office or hopeful aspirants to it, is precisely, that ordinary intellects—Nature's mere manufactured ware—are presented to honest credulous youths of immature judgment, as master minds, exceptions and ornaments of mankind. The students forthwith throw all their energies into the barren study of the endless, insipid scribblings of such mediocrities, thus wasting the short, invaluable period allotted to them for higher education, instead of using it to attain the sound information they might have found in the works of those extremely rare, genuine, truly exceptional thinkers, *nantes in gurgite vasto*, who only rise to the surface every now and then in the course of ages, because Nature produced but one of each kind, and then "destroyed the mould." For this generation also those great minds might have had life, had our youth not been cheated out of its share in their wisdom by these exceedingly pernicious extollers of mediocrity, members of the vast league and brotherhood of mediocrities, which is as flourishing to-day as it ever was and still hoists its flag as high as it can in persistent antagonism to all that is great and genuine, as humiliating to its members. Thanks to them, our age has declined to so low an ebb, that Kant's Philosophy, which it took our fathers years of study, of serious application and of strenuous effort to understand, has again become foreign to the present generation, which stands before it like ὄνος πρὸς λύραν, at times attacking it coarsely and clumsily—as barbarians throw stones at the statue of some Greek god which is foreign to them. Now, as this is the case, I feel it incumbent upon me to advise all champions of a Reason that perceives, comprehends, and knows directly—in short, that supplies material knowledge out of its own resources—to read, as something new to them, the *First Book* of Locke's work, which has been celebrated throughout the world for the last hundred and fifty years, and in it especially to peruse §§ 21-26 of the Third Chapter, expressly directed against all innate notions. For although Locke goes too far in denying all innate truths, inasmuch as he extends his denial even to our *formal* knowledge—a point in which he has been brilliantly rectified by Kant—he is nevertheless perfectly and undeniably right with reference to all *material* knowledge: that is, all knowledge which gives substance.

I have already said in my Ethics what I must nevertheless repeat here, because, as the Spanish proverb says, "*No huy peor sordo que quien no quiere oir*" (None so deaf as those who will not hear): namely, that if Reason were a faculty specially designed for Metaphysics, a faculty which supplied the material of knowledge and could reveal that which transcends all possible experience, the same harmony would necessarily reign between men on metaphysical and religious subjects—for they are identical—as on mathematical ones, and those who differed in opinion from the rest would simply be looked upon as not quite right in their mind. Now exactly the contrary takes place, for on no subject are men so completely at variance with one another as upon these. Ever since men first began to think, philosophical systems have opposed and combated each other everywhere; they are, in fact, often diametrically contrary to one another. Ever since men first began to believe (which is still longer), religions have fought against one another with fire and sword, with excommunication and cannons. But in times when faith was most ardent, it was not the lunatic asylum, but the Inquisition, with all its paraphernalia, which awaited individual heretics. Here again, therefore, experience flatly and categorically contradicts the false assertion, that Reason is a faculty for direct metaphysical knowledge, or, to speak more clearly, of inspiration from above. Surely it is high time that severe judgment should be passed upon this Reason, since, *horribile dictu*, so lame, so palpable a falsehood continues after half a century to be hawked about all over Germany, wandering year by year from the professors' chair to the students' bench, and from bench to chair, and has actually found a few simpletons, even in France, willing to believe in it, and carry it about in that country also. Here, however, French *bon-sens* will very soon send *la raison transcendentale* about its business.

But where was this falsehood originally hatched? How did the fiction first come into the world? I am bound to confess that it was first originated by Kant's Practical Reason with its Categorical Imperative. For when this Practical Reason had once been admitted, nothing further was needed than the addition of a second, no less sovereign Theoretical Reason, as its counterpart, or twin-sister: a Reason which proclaims metaphysical truths *ex tripode*. I have described the brilliant success of this invention in my Fundamental Problems of Ethics[1] to which work I refer my reader. Now, although I grant that Kant first gave rise to this false assumption, I am, nevertheless, bound to add, that those who want to dance are not long in finding a piper. For it is surely as though a curse lay on mankind, causing them, in virtue of a natural affinity for all that is corrupt and bad, to prefer and hold up to admiration the inferior, not to say downright defective, portions of the works of eminent minds, while the really admirable parts are tolerated as merely accessory. Very few in our time know wherein the peculiar depth and true grandeur of Kant's philosophy lies; for his works have necessarily ceased to be comprehended since they have ceased to be studied. In fact, they are now only cursorily read, for historical purposes, by those who are under the delusion that philosophy has advanced, not to say begun, since Kant. We soon perceive therefore, that in spite of all their talk about Kantian philosophy, these people really know nothing of it but the husk, the mere outer envelope, and that if perchance they may here or there have caught up a stray sentence or brought away a rough sketch of it, they have never penetrated to the depths of its meaning and spirit. People of this sort have always been chiefly attracted, in Kant's Philosophy, first of all by the Antinomies, on account of their oddity, but still more by his Practical Reason with its Categorical Imperative, nay even by the Moral Theory he placed on the top of it, though with this last he was never in earnest; for a theoretical dogma which has only practical validity, is very like the wooden guns we allow our children to handle without fear of danger: properly speaking, it belongs to the same category as: "Wash my skin, but without wetting it." Now, as regards the Categorical Imperative, Kant never asserted it as a fact, but, on the contrary, protests repeatedly against this being done; he merely served it up as the result of an exceedingly curious combination of thoughts, because he stood in need of a sheet-anchor for morality. Our professors of philosophy, however, never sifted the matter to the bottom, so that it seems as if no one before me had ever thoroughly investigated it. Instead of this, they made all haste to bring the Categorical Imperative into credit as a firmly established fact, calling it in their purism "the moral law"—which, by the way, always reminds me of Bürger's "Mam'zelle Larègle;" indeed, they have made out of it something as massive as the stone tables of Moses, whose place it entirely takes, for them. Now in my Essay upon the Fundament of Morality, I have brought this same Practical Reason with its Categorical Imperative under the anatomical knife, and proved so clearly and conclusively that they never had any life or truth, that I should like to see the man who can refute me with reasons, and so help the Categorical Imperative honestly on its legs again. Meanwhile, our professors of philosophy do not allow themselves to be put out of countenance by this. They can no more dispense with their "moral law of practical Reason," as a convenient *deus ex machina* on which to found their morality, than with Free Will: both are essential points in their old woman's philosophy. No matter if

---

[1] Schopenhauer, "Die beiden Grundprobleme der Ethik," p. 148 and *sqq.* (p. 146 *et seq.* of 2nd edition.)

I have made an end of both, since, for them, both continue to exist, like deceased sovereigns who for political reasons are occasionally allowed to continue reigning for a few days after their death. These worthies simply pursue their tactics of old against my merciless demolition of those two antiquated fictions: silence, silence; and so they glide past noiselessly, feigning ignorance, to make the public believe that I and the like of me are not worth listening to. Well, to be sure, their philosophical calling comes to them from the ministry, while mine only comes from Nature. True, we may at last perhaps discover that these heroes act upon the same principle as that idealistic bird, the ostrich, which imagines that by closing its eyes it does away with the huntsman. Ah well! we must bide our time; if the public can only be brought to take up meantime with the barren twaddle, the unbearably tiresome repetitions, the arbitrary constructions of the Absolute, and the infant-school morality of these gentlemen—say, till I am dead and they can trim up my works as they like—we shall then see.

> Morgen habe denn das Rechte
> Seine Freunde wohlgesinnet,
> Wenn nur heute noch das Schlechte
> Vollen Platz und Gunst gewinnet.
>
> GÖTHE, *West-Oestlicher Divan.*

But do these gentlemen know what time of day it is? A long predicted epoch has set in; the church is beginning to totter, nay it totters already to such a degree, that it is doubtful whether it will ever be able to recover its centre of gravity; for faith is lost. The light of revelation, like other lights, requires a certain amount of darkness as an indispensable condition. The number of those who have been unfitted for belief by a certain degree and extent of knowledge, is already very large. Of this we have evident signs in the general diffusion of that shallow Rationalism which is showing its bulldog face daily more and more overtly. It quietly sets to work to measure those profound mysteries of Christianity over which centuries have brooded and disputed with its draper's ell, and thinks itself wondrous wise withal. It is, however, the very quintessence of Christianity, the dogma of Original Sin, which these shallow-brained Rationalists have especially singled out for a laughing-stock; precisely because nothing seems clearer or more certain to them, than that existence should begin for each of us with our birth: nothing therefore so impossible as that we can have come into the world already burdened with guilt. How acute! And just as in times of prevailing poverty and neglect, wolves begin to make their appearance in villages; so does Materialism, ever lying in wait, under these circumstances lift up its head and come to the front hand in hand with Bestialism, its companion, which some call Humanism. Our thirst after knowledge augments with our incapacity for belief. There comes a boiling-point in the scale of all intellectual development, at which all faith, all revelation, and all authority evaporate, and Man claims the right to judge for himself; the right, not only to be taught, but to be convinced. The leading-strings of his infancy have fallen off, and henceforth he demands leave to walk alone. Yet his craving for Metaphysics can no more be extinguished than any physical want. Then it is, that the desire for philosophy becomes serious and that mankind invokes the spirits of all the genuine thinkers who have issued from its ranks. Then, too, empty verbiage and the impotent endeavours of emasculated intellects no longer suffice; the want of a serious philosophy is felt, having other aims in view than fees and salaries, and caring little therefore whether it meets the approbation of cabinet-ministers, or councillors, whether it serves the purposes of this or that religious faction, or not; a philosophy which, on the contrary, clearly shows that it has a very different mission in view from that of procuring a livelihood for the poor in spirit.

But I return to my argument. By means of an amplification which only needed a little audacity, a *theoretical* oracle had been added to the *practical* oracle with which Kant had wrongly endowed Reason. The credit of this invention is no doubt due to F. H. Jacobi, from whom the professional philosophers joyfully and thankfully received the precious gift, as a means to help them out of the straits to which Kant had reduced them. That cool, calm, deliberate Reason, which Kant had criticized so mercilessly, was henceforth degraded to *Understanding* and known by this name; while Reason was supposed to denote an entirely imaginary, fictitious faculty, admitting us, as it were, to a little window overlooking the superlunar, nay, the supernatural world, through which all those truths are handed to us ready cut and dried, concerning which old-fashioned, honest, reflective Reason had for ages vainly argued and contended. And it is on such a mere product of the imagination, such a completely fictitious Reason as this, that German sham philosophy has been based for the last fifty years; first, as the free construction and projection of the absolute *Ego* and the emanation from it of the *non-Ego ;* then, as the intellectual intuition of absolute identity or indifference, and its evolutions to Nature; or again, as the arising of God out of his dark depths or bottomless pit[1] *à la* Jakob Böhme; lastly, as the pure, self-thinking, absolute Idea, the scene of the ballet-dance of the self-moving conceptions—still, at the same time, always as immediate apprehension (*Vernehmen*) of the Divine, the supersensuous, the Deity, verity, beauty and as many other "-ties" as may be desired, or even as a mere vague presentiment[1] of all these wonders.—So this is Reason, is it? Oh no, it is simply a farce, of which our professors of philosophy, who are sorely perplexed by Kant's serious critiques, avail themselves in order to pass off the subjects of the established religion of their country somehow or other, *per fas aut nefas*, for the results of philosophy.

---

[1] "*Aus seinem Grund oder Ungrund.*"

For it behoves all professorial philosophy, before all things, to establish beyond doubt, and to give a philosophical basis to, the doctrine, that there is a God, Creator, and Ruler of the Universe, a personal, consequently individual, Being, endowed with Understanding and Will, who has created the world out of nothing, and who rules it with sublime wisdom, power and goodness. This obligation, however, places our professors of philosophy in an awkward position with respect to serious philosophy. For Kant had appeared and the Critique of Pure Reason, was written more than sixty years ago, the result being, that of all the proofs of the existence of God which had been brought forward during the Christian ages, and which may be reduced to three which alone are possible, none are able to accomplish the desired end. Nay, the impossibity of any such proof, and with it the impossibility of all speculative theology, is shown at length *à priori* and not in the empty verbiage or Hegelian jargon now in fashion, which may be made to mean anything one likes, but quite seriously and honestly, in the good old-fashioned way; wherefore, however little it may have been to the taste of many people, nothing cogent could be brought forward in reply to it for the last sixty years, and the proofs of the existence of God have in consequence lost all credit, and are no longer in use. Our professors of philosophy have even begun to look down upon them and treat them with decided contempt, as ridiculous and superfluous attempts to demonstrate what was self-evident.

---

[1] "*Ahnung* without the *d*." See above, p. 133. (Tr.'s note.)

Ho! ho! what a pity this was not found out sooner! How much trouble might have been spared in searching whole centuries for these proofs, and how needless it would have been for Kant to bring the whole weight of his Critique of Reason to bear upon and crush them! Some folks, will no doubt be reminded by this contempt of the fox with the sour grapes. But those who wish to see a slight specimen of it will find a particularly characteristic one in Schelling's "Philosophische Schriften," vol. i., 1809, p. 152. Now, whilst others were consoling themselves with Kant's assertion, that it is just as impossible to prove the non-existence, as the existence, of God—as if, forsooth, the old wag did not know that *affirmanti incumbit probatio*—Jacobi's admirable invention came to the rescue of our perplexed professors, and granted German *savants* of this century a peculiar sort of Reason that had never been known or heard of before.

Yet all these artifices were quite unnecessary. For the impossibility of proving the existence of God by no means interferes with that existence, since it rests in unshakeable security on a much firmer basis. It is indeed a matter of revelation, and this is besides all the more certain, because that revelation was exclusively vouchsafed to a single people, called, on this account, the chosen people of God. This is made evident by the fact, that the notion of God, as personal Ruler and Creator of the world, ordaining everything for the best, is to be found in no other religion but the Jewish, and the two faiths derived from it, which might consequently in a wider sense be called Jewish sects. We find no trace of such a notion in any other religion, ancient or modern. For surely no one would dream of confounding this Creator God Almighty with the Hindoo Brahm, which is living in me, in you, in my horse, in your dog—or even with Brahma, who is born and dies to make way for other Brahmas, and to whom moreover the production of the world is imputed as sin and guilt[1]—least of all with beguiled Saturn's voluptuous son, to whom Prometheus, defiant, prophesies his downfall. But if we finally direct our attention towards the religion which numbers most followers, and in this respect may therefore be said to rank foremost: that is, Buddhism, we can no longer shut our eyes to the fact that it is as decidedly and explicitly atheistic, as it is idealistic and ascetic; and this moreover to such a degree, that its priests express the greatest abhorrence of the doctrine of pure Theism whenever it is brought to their notice. Therefore, in a treatise handed to a Catholic bishop by the High Priest of the Buddhists at Ava,[2] the doctrine "that there is a Being who has created the world and all things, and who alone is worthy of worship," is counted among the six damnable heresies.[3] This is entirely corroborated by I. J. Schmidt, a most excellent and learned authority, whom I consider as having undoubtedly the deepest knowledge of Buddhism of any European *savant*, and who, in his work "Upon the connection between Gnostic doctrines and Buddhism," p. 9, says:—

"In the writings of the Buddhists not a trace is to be found of any positive indication of a Supreme Being as the principle of Creation. Whenever this subject presents itself consistently in the course of argument, it seems, indeed, to be intentionally evaded." And again: "The system of Buddhism knows of no eternal, uncreated, one and only Being, having existed before Time and created all that is visible and invisible. This idea is quite foreign to Buddhism, and not a trace of it is to be found in Buddhist works. And just as little mention do we find of Creation. True, the visible Universe is not without a beginning, but it *arose* out of empty Space, according to consistent, immutable, natural laws. We should however err, were we to assume that anything—call it Fate or Nature—is regarded or revered by the Buddhists as a divine principle; on the contrary, it is just this very development of empty Space, this precipitate from it or this division into countless parts, this Matter thus arising, which constitutes the Evil of *Jirtintschi*, or of the Universe in its inner and outer relations, out of which sprang *Ortschilang*, or continuous change according to immutable laws, which the same Evil had established." Then again:[1] "The expression *Creation* is foreign to Buddhism, which only knows *Cosmogony*;" and, "We must comprehend that no idea of a creation of divine origin is compatible with their system." I could bring forward a hundred corroborative passages like these; but will limit myself to one more, which I quote on account of its popular and official character. The third volume of a very instructive Buddhist work, "Mahavansi, Raja-ratnacari, and Raja-Vali,"[2] contains a translation of the interrogatories to which the High Priests of the five chief Pagodas were separately and successively subjected by the Dutch Governor of Ceylon about the year 1766. It is exceedingly amusing to see the contrast between the interlocutors, who have the greatest difficulty in understanding one another's meaning. In conformity with the doctrines of their faith, these priests, who are penetrated with love and compassion for all living beings, not excepting even Dutch Governors, spare no pains to satisfy him by their answers. But the artless, naïve Atheism of these priests, whose piety extends even to practising continence, soon comes into conflict with the deep convictions founded on Judaism, imbibed by the Governor in his infancy. This faith has become a second nature for him; he cannot in the least understand that these priests are not Theists, therefore he constantly returns to his inquiries after a Supreme Being, asking them who created the world, and so forth. Whereupon they answer that there can be no higher being than Buddha Shakia-Muni, the Victorious and the Perfect, who, though a king's son by birth, voluntarily lived the life of a beggar, and preached to the end his sublime doctrine, for the Redemption of mankind, and for our salvation from the misery of constant renascence. They hold that the world has not been made by anyone,[1] that it is self-created, that Nature spreads it out, and draws it in again; but that it is that, which existing, does not exist: that it is the necessary accompaniment of renascence, and that renascence is the result of our sinful conduct, &c. &c. &c. I mention such facts as these chiefly on account of the really scandalous way in which German *savants* still universally persist, even to the present day, in looking upon Religion and Theism as identical and synonymous; whereas Religion is, in fact, to Theism as the genus to the single species, and Judaism and Theism are alone identical. For this reason we stigmatize as heathen all nations who are neither Jews, Christians, nor Mahometans. Christians are even taxed by Mahometans and Jews with the impurity of their Theism, because of the dogma of the Trinity. For, whatever may be said to the contrary,

---

[1] "If Brimha be unceasingly employed in the creation of worlds . . . . . how can tranquillity be obtained by inferior orders of being?" Prabodh Chandro Daya, translated by J. Taylor, p. 23.—Brahma is also part of the Trimurti, which is the personification of nature, as procreation, preservation, and death: that is, he represents the first of these.

[2] See "Asiatic Researches," vol. vi. p. 268, and Sangermano's "Description of the Burmese Empire," p. 81.

[3] See I. J. Schmidt, "Forschungen im Gebiete der älteren Bildungsgeschichte Mittelasiens." St. Petersburg, 1824, pp. 276, and 180.

---

[1] I. J. Schmidt, Lecture delivered in the Academy at St. Petersburg on the 15th Sept. 1830, p. 26.

[2] Mahavansi, Raja-ratnacari, and Raja-Vali, from the Singhalese, by E. Upham. London, 1833.

---

[1] Κόσμον τόνδε, φησὶν Ἡράκλειτος, οὔτε τις θεῶν οὔτε ἀνθρώπων ἐποίησεν. (Neither a God nor a man created this world, says Heraclitus.) Plut. "De animæ procreatione," c. 5.

Christianity has Indian blood in its veins, therefore it constantly tends to free itself from Judaism. The Critique of Pure Reason is the most serious attack that has ever been made upon Theism—and this is why our professors of philosophy have been in such a hurry to set Kant aside; but had that work appeared in any country where Buddhism prevailed, it would simply have been regarded as an edifying treatise intended to refute heresy more thoroughly by a salutary confirmation of the orthodox doctrine of Idealism—that is, the doctrine of the merely apparent existence of the world, as it presents itself to our senses. Even the two other religions which coexist with Buddhism in China—those of Taotsee and of Confucius—are just as Atheistic as Buddhism itself; wherefore the missionaries have never been able to translate the first verse of the Pentateuch into Chinese, because there is no word in the language for God and Creation. Even the missionary Gützlaff, in his "History of the Chinese Empire," p. 18, has the honesty to say: "It is extraordinary that none of the (Chinese) philosophers ever soared high enough to reach the knowledge of a Creator and Lord of the Universe, although they possessed the Light of Nature in full measure." J. F. Davis likewise quotes a passage, which is quite in accordance with this, from Milne's Preface to his translation of the Shing-yu, where in speaking of that work, he says that we may see from it "that the bare Light of Nature, as it is called, even when aided by all the light of Pagan philosophy, is totally incapable of leading men to the knowledge and worship of the true God." All this confirms the fact that revelation is the sole foundation on which Theism rests; indeed, it must be so, unless revelation is to be superfluous. This is a good opportunity for observing that the word Atheism itself implies a surreptitious assumption, since it takes Theism for granted as a matter of course. It would be more honest to say

Non-Judaism instead of Atheism, and Non-Jew instead of Atheist.

Now as, according to the above, the existence of God belongs to revelation, by which it is firmly established, it has no need whatever of human authentication. Philosophy, however, is properly speaking only an idle, superfluous attempt to let Reason—that is, the human power of thinking, reflecting, deliberating—once in a while, try its own powers unassisted, as a child is now and then allowed to run alone on a lawn and try its strength without leading-strings, just to see what will come of it. Tests and experiments of this kind we call *speculation*; and it lies in the nature of the matter that it should, for once, leave all authority, human or divine, out of consideration, ignore it, and go its own way in search of the most sublime, most important truths. Now, if on this basis it should arrive at the very same results as those mentioned above, to which Kant had come, speculation has no right on that account to cast all honesty and conscience forthwith aside, and take to by-ways, in order somehow or other to get back to the domain of Judaism, as its *conditio sine qua non*; it ought rather henceforth to seek truth quite honestly and simply by any road that may happen to lie open before it, but never to allow any other light than that of Reason to guide it: thus advancing calmly and confidently, like one at work in his vocation, without concern as to where that road may lead.

If our professors of philosophy put a different construction on the matter, and hold that they cannot eat their bread in honour, so long as they have not reinstalled God Almighty on his throne—as if, forsooth, he stood in need of *them*—this already accounts for their not relishing my writings, and explains why I am not the man for them; for I certainly do not deal in this sort of article, nor have I the newest reports to communicate about the Almighty every Leipzig fair-time, as they have.

CHAPTER VI.

ON THE THIRD CLASS OF OBJECTS FOR THE SUBJECT AND THAT FORM OF THE PRINCIPLE OF SUFFICIENT REASON WHICH PREDOMINATES IN IT.

§ 35. *Explanation of this Class of Objects.*

IT is the formal part of complete representations—that is to say, the intuitions given us *à priori* of the forms of the outer and inner sense, *i.e.* of Space and of Time—which constitutes the Third Class of Objects for our representative faculty.

As pure intuitions, these forms are objects for the faculty of representation by themselves and apart from complete representations and from the determinations of being empty or filled which these representations first add to them; since even pure points and pure lines cannot be brought to sensuous perception, but are only *à priori* intuitions, just as the infinite expansion and the infinite divisibility of Space and of Time are exclusively objects of pure intuition and foreign to empirical perception. That which distinguishes the third class of representations, in which Space and Time are *pure intuitions*, from the first class, in which they are *sensuously* (and moreover conjointly) *perceived*, is Matter, which I have therefore defined, on the one hand, as the perceptibility of Space and Time, on the other, as objectified Causality.

The form of Causality, on the contrary, which belongs to the Understanding, is not separately and by itself an object for our faculty of representation, nor have we consciousness of it, until it is connected with what is material in our knowledge.

§ 36. *Principle of the Sufficient Reason of Being.*

Space and Time are so constituted, that all their parts stand in mutual relation, so that each of them conditions and is conditioned by another. We call this relation in Space, *position;* in Time, *succession.* These relations are peculiar ones, differing entirely from all other possible relations of our representations; neither the Understanding nor the Reason are therefore able to grasp them by means of mere conceptions, and pure intuition *à priori* alone makes them intelligible to us; for it is impossible by mere conceptions to explain clearly what is meant by above and below, right and left, behind and before, before and after. Kant rightly confirms this by the assertion, that the distinction between our right and left glove cannot be made intelligible in any other way than by intuition. Now, the law by which the divisions of Space and of Time determine one another reciprocally with reference to these relations (position and succession) is what I call the *Principle of the Sufficient Reason of Being, principium rationis sufficientis essendi.* I have already given an example of this relation in § 15, by which I have shown, through the connection between the sides and angles of a triangle, that this relation is not only quite different from that between cause and effect, but also from that between reason of knowledge and consequent; wherefore here the condition may be called *Reason of Being, ratio essendi.* The insight into such a *reason of being* can, of course, become a reason of knowing; just as the insight into the law of causality and its application to a particular case is the reason of knowledge of the effect; but this in no way annuls the complete distinction between Reason of Being, Reason of Becoming, and Reason of Knowing. It often happens, that what according to *one* form of our principle is *consequence*, is, according to another, *reason*. The rising of the quicksilver in a thermometer, for instance, is the *consequence* of increased heat according to the law of causality, while according to the principle of the sufficient reason of knowing it is the *reason*, the ground of knowledge, of the increased heat and also of the judgment by which this is asserted.

§ 37. *Reason of Being in Space.*

The position of each division of Space towards any other, say of any given line—and this is equally applicable to planes, bodies, and points—determines also absolutely its totally different position with reference to any other possible line; so that the latter position stands to the former in the relation of the consequent to its reason. As the position of this given line towards any other possible line likewise determines its position towards all the others, and as therefore the position of the first two lines is itself determined by all the others, it is immaterial which we consider as being first determined and determining the others, *i.e.* which particular one we regard as *ratio* and which others as *rationata*. This is so, because in Space there is no succession; for it is precisely by uniting Space and Time to form the collective representation of the complex of experience, that the representation of coexistence arises. Thus an analogue to so-called reciprocity prevails everywhere in the Reason of Being in Space, as we shall see in § 48, where I enter more fully into the reciprocity of reasons. Now, as every line is determined by all the others just as much as it determines them, it is arbitrary to consider any line merely as determining and not as being determined, and the position of each towards any other admits the question as to its position with reference to some other line, which second position necessarily determines the first and makes it that which it is. It is therefore just as impossible to find an end *a parte ante* in the series of links in the chain of Reasons of Being as in that of Reasons of Becoming, nor can we find any *a parte post* either, because of the infinity of Space and of the lines possible within Space. All possible relative spaces are figures, because they are limited; and all these figures have their Reason of Being in one another, because they are conterminous. The *series rationum essendi* in Space therefore, like the *series rationum fiendi*, proceeds *in infinitum;* and moreover not only in a single direction, like the latter, but in all directions.

Nothing of all this can be proved; for the truth of these principles is transcendental, they being directly founded upon the intuition of Space given us *à priori*.

§ 38. *Reason of being in Time. Arithmetic.*

Every instant in Time is conditioned by the preceding one. The Sufficient Reason of Being, as the law of consequence, is so simple here, because Time has only one dimension, therefore it admits of no multiplicity of relations. Each instant is conditioned by its predecessor; we can only reach it through that predecessor: only so far as this *was* and has elapsed, does the present one exist. All counting rests upon this nexus of the divisions of Time, numbers only serving to mark the single steps in the succession; upon it therefore rests all arithmetic likewise, which teaches absolutely nothing but methodical abbreviations of numeration. Each number pre-supposes its predecessors as the reasons of its being: we can only reach the number *ten* by passing through all the preceding numbers, and it is only in virtue of this insight that I know, that where ten are, there also are eight, six, four.

§ 39. *Geometry.*

The whole science of Geometry likewise rests upon the nexus of the position of the divisions of Space. It would, accordingly, be an insight into that nexus; only such an insight being, as we have already said, impossible by means of mere conceptions, or indeed in any other way than by intuition, every geometrical proposition would have to be brought back to sensuous intuition, and the proof would simply consist in making the particular nexus in question clear; nothing more could be done. Nevertheless we find Geometry treated quite differently. Euclid's Twelve Axioms are alone held to be based upon mere intuition, and even of these only the Ninth, Eleventh, and Twelfth are properly speaking admitted to be founded upon different, separate intuitions; while the rest are supposed to be founded upon the knowledge that in science we do not, as in experience, deal with real things existing for themselves side by side, and susceptible of endless variety, but on the contrary with conceptions, and in Mathematics with *normal intuitions*, i.e. figures and numbers, whose laws are binding for all experience, and which therefore combine the comprehensiveness of the conception with the complete definiteness of the single representation. For although, as intuitive representations, they are throughout determined with complete precision—no room being left in *this* way by anything remaining undetermined—still they are general, because they are the bare forms of all phenomena, and, as such, applicable to all real objects to which such forms belong, What Plato says of his Ideas would therefore, even in Geometry, hold good of these normal intuitions, just as well as of conceptions, *i.e.* that two cannot be exactly similar, for then they would be but one.[1] This would, I say, be applicable also to normal intuitions in Geometry, if it were not that, as exclusively spacial objects, these differ from one another in mere juxtaposition, that is, in place. Plato had long ago remarked this, as we are told by Aristotle:[2] *ἔτι δὲ, παρὰ τὰ αἰσθητὰ καὶ τὰ εἴδη, τὰ μαθηματικὰ τῶν πραγμάτων εἶναί φησι μεταξύ, διαφέροντα τῶν μὲν αἰσθητῶν τῷ ἀΐδια καὶ ἀκίνητα εἶναι, τῶν δὲ εἰδῶν τῷ τὰ μὲν πόλλ' ἄττα ὅμοια εἶναι, τὸ δὲ εἶδος αὐτὸ ἓν ἕκαστον μόνον* (*item, præter sensibilia et species, mathematica rerum ait media esse, a sensibilibus quidem differentia eo, quod perpetua et immobilia sunt, a speciebus vero eo, quod illorum quidem multa quædam similia sunt, species vero ipsa unaquæque sola*). Now the mere knowledge that such a difference of place does not annul the rest of the identity, might surely, it seems to me, supersede the other nine axioms, and would, I think, be better suited to the nature of science, whose aim is knowledge of the particular through the general, than the statement of nine separate axioms all based upon the same insight. Moreover, what Aristotle says: *ἐν τούτοις ἡ ἰσότης ἑνότης* (*in illis æqualitas unitas est*)[3] then becomes applicable to geometrical figures.

But with reference to the normal intuitions in Time, *i.e.*

---

[1] Platonic ideas may, after all, be described as normal intuitions, which would hold good not only for what is formal, but also for what is material in complete representations—therefore as complete representations which, as such, would be determined throughout, while comprehending many things at once, like conceptions: that is to say, as representatives of conceptions, but which are quite adequate to those conceptions, as I have explained in § 28.

[2] Aristot. "Metaph." i. 6, with which compare x. 1. "Further, says he, besides things sensible and the ideas, there are things mathematical coming in between the two, which differ from the things sensible, inasmuch as they are eternal and immovable, and from the ideas, inasmuch as many of them are like each other; but the idea is absolutely and only one." (Tr.'s Add.)

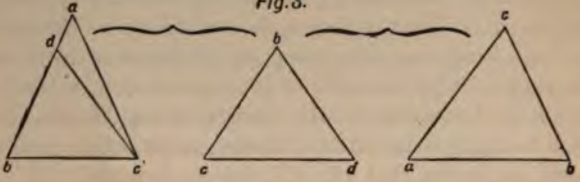
[3] "In these it is equality that constitutes unity." (Tr.'s Add.)

to numbers, even this distinction of juxtaposition no longer exists. Here, as with conceptions, absolutely nothing but the *identitas indiscernibilium* remains: for there is but one five and one seven. And in this we may perhaps also find a reason why 7 + 5 = 12 is a synthetical proposition *à priori*, founded upon intuition, as Kant profoundly discovered, and not an identical one, as it is called by Herder in his "Metakritik" . 12 = 12 is an identical proposition.

In Geometry, it is therefore only in dealing with axioms that we appeal to intuition. All the other theorems are demonstrated: that is to say, a reason of knowing is given, the truth of which everyone is bound to acknowledge. The logical truth of the theorem is thus shown, but not its transcendental truth (v. §§ 30 and 32), which, as it lies in the reason of *being* and not in the reason of *knowing*, never can become evident excepting by means of intuition. This explains why this sort of geometrical demonstration, while it no doubt conveys the conviction that the theorem which has been demonstrated is true, nevertheless gives no insight as to *why* that which it asserts is what it is. In other words, we have not found its Reason of Being; but the desire to find it is usually then thoroughly roused. For proof by indicating the reason of knowledge only effects conviction (*convictio*), not knowledge (*cognitio*): therefore it might perhaps be more correctly called *elenchus* than *demonstratio*. This is why, in most cases, therefore, it leaves behind it that disagreeable feeling which is given by all want of insight, when perceived; and here, the want of knowledge *why* a thing is as it is, makes itself all the more keenly felt, because of the certainty just attained, *that* it is as it is. This impression is very much like the feeling we have, when something has been conjured into or out of our pocket, and we cannot conceive how. The reason of knowing which, in such demonstrations as these, is given without the reason of being, resembles certain physical theories, which present the phenomenon without being able to indicate its cause: for instance, Leidenfrost's experiment, inasmuch as it succeeds also in a platina crucible; whereas the reason of being of a geometrical proposition which is discovered by intuition, like every knowledge we acquire, produces satisfaction. When once the reason of being is found, we base our conviction of the truth of the theorem upon that reason alone, and no longer upon the reason of knowing given us by the demonstration. Let us, for instance, take the sixth proposition of the first Book of Euclid:—

"If two angles of a triangle are equal, the sides also which subtend, or are opposite to, the equal angles shall be equal to one another." (See fig. 3.)

Fig. 3.



Which Euclid demonstrates as follows:—

"Let *a b c* be a triangle having the angle *a b c* equal to the angle *a c b*, then the side *a c* must be equal to the side *a b* also.

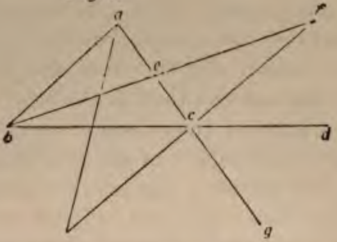
"For, if side *a b* be not equal to side *a c*, one of them is greater than the other. Let *a b* be greater than *a c;* and from *b a* cut off *b d* equal to *c a*, and draw *d c*. Then, in the triangles *d b c*, *a b c*, because *d b* is equal to *a c*, and *b c* is common to both triangles, the two sides *d b* and *b c* are equal to the two sides *a c*, *a b*, each to each; and the angle *d b c* is equal to the angle *a c b*, therefore the base *d c* is equal to the base *a b*, and the triangle *d b c* is equal to the triangle *a b c*, the less triangle equal to the greater,—which is absurd. Therefore *a b* is not unequal to *a c*, that is, *a b* is equal to *a c*."

Now, in this demonstration we have a reason of knowing for the truth of the proposition. But who bases his conviction of that geometrical truth upon this proof? Do we not rather base our conviction upon the reason of being, which we know intuitively, and according to which (by a necessity which admits of no further demonstration, but only of evidence through intuition) two lines drawn from both extreme ends of another line, and inclining equally towards each other, can only meet at a point which is equally distant from both extremities; since the two arising angles are properly but one, to which the oppositeness of position gives the appearance of being two; wherefore there is no reason why the lines should meet at any point nearer to the one end than to the other.

It is the knowledge of the reason of being which shows us the necessary consequence of the conditioned from its condition—in this instance, the lateral equality from the angular equality—that is, it shows their connection; whereas the reason of knowing only shows their coexistence. Nay, we might even maintain that the usual method of proving merely convinces us of their coexistence in the actual figure given us as an example, but by no means that they are always coexistent; for, as the necessary connection is not shown, the conviction we acquire of this truth rests simply upon induction, and is based upon the fact, that we find it is so in every figure we make. The reason of being is certainly not as evident in all cases as it is in simple theorems like this 6th one of Euclid; still I am persuaded that it might be brought to evidence in every theorem, however complicated, and that the proposition can always be reduced to some such simple intuition. Besides, we are all just as conscious *à priori* of the necessity of such a reason of being for each relation of Space, as we are of the necessity of a cause for each change. In complicated theorems it will, of course, be very difficult to show that reason of being; and this is not the place for difficult geometrical researches. Therefore, to make my meaning somewhat clearer, I will now try to bring back to its reason of being a moderately complicated proposition, in which nevertheless that reason is not immediately evident. Passing over the intermediate theorems, I take the 16th:

"In every triangle in which one side has been produced, the exterior angle is greater than either of the interior opposite angles."

Fig. 4.



This Euclid demonstrates in the following manner (see fig. 4):—

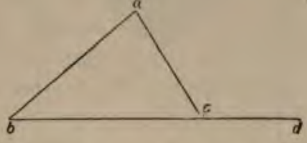
"Let *a b c* be a triangle; and let the side *b c* be produced to *d*; then the exterior angle *a c d* shall be greater than either of the interior opposite angles *b a c* or *c b a*. Bisect the side *a c* at *e*, and join *b e*; produce *b e* to *f*, making *e f* equal to *e b*, and join *f c*. Produce *a c* to *g*. Because *a e* is equal to *e c*, and *b e* to *e f*; the two sides *a e*, *e b*, are equal to the two sides *c e*, *e f*, each to each; and the angle *a e b* is equal to the angle *c e f*, because they are opposite vertical angles; therefore the base *a b* is equal to the base *c f*, and the triangle *a e b* is equal to the triangle *c e f*, and the remaining angles of one triangle to the remaining angles of the other, each to each, to which the equal sides are opposite; therefore the angle *b a e* is equal to the angle *e c f*. But the angle *e c d* is greater than the angle *e c f*. Therefore the angle *a c d* is greater than the angle *a b c*."

"In the same manner, if the side *b c* be bisected, and the side *a c* be produced to *g*, it may be demonstrated that the angle *b c g*, that is, the opposite vertical angle *a c d* is greater than the angle *a b c*."

My demonstration of the same proposition would be as follows (see fig. 5):—

For the angle *b a c* to be even equal to, let alone greater than, the angle *a c d*, the line *b a* toward *c a* would have to lie in the same direction as *b d* (for this is precisely what is meant by equality of the angles), *i.e.*, it must be parallel with *b d*; that is to say, *b a* and *b d* must never meet; but in order to form a triangle they must meet (reason of being), and must thus do the contrary of that which would be required for the angle *b a c* to be of the same size as the angle *a c d*.

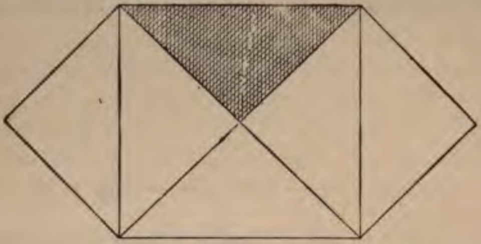
Fig. 5.



For the angle *a b c* to be even equal to, let alone greater than, the angle *a c d*, line *b a* must lie in the same direction towards *b d* as *a c* (for this is what is meant by equality of the angles), *i.e.*, it must be parallel with *a c*, that is to say, *b a* and *a c* must never meet; but in order to form a triangle *b a* and *a c* must meet and must thus do the contrary of that which would be required for the angle *a b c* to be of the same size as *a c d*.

By all this I do not mean to suggest the introduction of a new method of mathematical demonstration, nor the substitution of my own proof for that of Euclid, for which its whole nature unfits it, as well as the fact that it presupposes the conception of parallel lines, which in Euclid comes much later. I merely wished to show what the reason of being is, and wherein lies the difference between it and the reason of knowing, which latter only effects *convictio*, a thing that differs entirely from insight into the reason of being. The fact that Geometry only aims at effecting *convictio*, and that this, as I have said, leaves behind it a disagreeable impression, but gives no insight into the reason of being—which insight, like all knowledge, is satisfactory and pleasing—may perhaps be one of the reasons for the great dislike which many otherwise eminent heads have for mathematics.

Fig. 6.



I cannot resist again giving fig. 6, although it has already been presented elsewhere; because the mere sight of it without words conveys ten times more persuasion of the truth of the Pythagorean theorem than Euclid's mousetrap demonstration.

Those readers for whom this chapter may have a special interest will find the subject of it more fully treated in my chief work, "Die Welt als Wille und Vorstellung," vol. i. § 15; vol. ii. chap. 13.

CHAPTER VII.

ON THE FOURTH CLASS OF OBJECTS FOR THE SUBJECT, AND THE FORM OF THE PRINCIPLE OF SUFFICIENT REASON WHICH PREDOMINATES IN IT.

§ 40. *General Explanation.*

THE last Class of Objects for our representative faculty which remains to be examined is a peculiar but highly important one. It comprises but *one* object for each individual: that is, the immediate object of the inner sense, the *Subject in volition*, which is Object for the Knowing Subject; wherefore it manifests itself in Time alone, never in Space, and as we shall see, even in Time under an important restriction.

§ 41. *Subject of Knowledge and Object.*

All knowledge presupposes Subject and Object. Even self-consciousness (*Selbstbewusstsein*) therefore is not absolutely simple, but, like our consciousness of all other things (*i.e.*, the faculty of perception), it is subdivided into that which is known and that which knows. Now, that which is known manifests itself absolutely and exclusively as *Will.*

The Subject accordingly knows itself exclusively as *willing*, but not as *knowing.* For the *ego* which represents, never can itself become representation or Object, since it conditions all representations as their necessary correlate; rather may the following beautiful passage from the Sacred Upanishad be applied to it: *Id videndum non est: omnia videt; et id audiendum non est: omnia audit; sciendum non est: omnia scit: et intelligendum non est: omnia intelligit. Præter id, videns, et sciens, et audiens, et intelligens ens aliud non est.*[1]

There can therefore be no *knowledge of knowing*, because this would imply separation of the Subject from knowing, while it nevertheless knew that knowing—which is impossible.

My answer to the objection, "I not only know, but know also that I know," would be, "Your knowing that you know only differs in words from your knowing. 'I know that I know' means nothing more than 'I know,' and this again, unless it is further determined, means nothing more than '*ego*.' If your knowing and your knowing that you know are two different things, just try to separate them, and first to know without knowing that you know, then to know that you know without this knowledge being at the same time knowing." No doubt, by leaving all *special* knowing out of the question, we may at last arrive at the proposition "*I know*"—the last abstraction we are able to make; but this proposition is identical with "*Objects exist for me*," and this again is identical with "*I am Subject*," in which nothing more is contained than in the bare word "*I*."

Now, it may still be asked how the various cognitive faculties belonging to the Subject, such as Sensibility, Understanding, Reason, are known to us, if we do not know the Subject. It is not through our knowing having become an Object for us that these faculties are known to us, for then there would not be so many conflicting judgments concerning them; they are inferred rather, or more correctly, they are general expressions for the established classes of representations which, at all times, have been more or less clearly distinguished in those cognitive faculties. But, with reference to the necessary correlate of these representations as their condition, *i.e.*, the Subject, these faculties are abstracted from them (the representations), and stand consequently towards the classes of representations in precisely the same relation as the Subject in general towards the Object in general. Now, just as the Object is at once posited with the Subject (for the word itself would otherwise have no meaning), and conversely, as the Subject is at once posited with the Object—so that being the Subject means exactly as much as having an Object, and being an Object means the same thing as being known by the Subject—so likewise, when an Object is assumed as being determined *in any particular way*, do we also assume that the Subject *knows precisely in that particular way*. So far therefore it is immaterial whether we say that Objects have such and such peculiar inherent determinations, or that the Subject knows in such and such ways. It is indifferent whether we say that Objects are divided into such and such classes, or that such and such different cognitive faculties are peculiar to the Subject. In that singular compound of depth and superficiality, Aristotle, are to be found traces even of insight into this truth, and indeed the critical philosophy lies in embryo in his works. He says:[1] *ἡ φυχὴ τὰ ὄντα πώς ἐστι πάντα* (*anima quammodo est universa, quæ sunt*). And again: *ὁ νοῦς ἐστι εἶδος εἰδῶν*, *i.e.*, the understanding is the form of forms, *καὶ ἡ αἴσθησις εἶδος αἰσθητῶν*, and sensibility the form of sensuous objects. Accordingly, it is all one whether we say, "sensibility and understanding are no more;" or, "the world is at an end." It comes to the same thing whether we say, "There are no conceptions," or "Reason is gone and animals alone remain."

---

[1] "Oupnekhat," vol. i. p. 202.

---

[1] Aristot., "De anima," iii. 8. "In a certain sense the intellect is all that exists." (Tr.'s Add.)

The dispute between Realism and Idealism, which appeared for the last time in the dispute between the Dogmatists and Kantians, or between Ontology and Metaphysics on the one hand and Transcendental Æsthetic and Transcendental Logic on the other, arose out of the misapprehension of this relation and was based upon its misapprehension with reference to the First and Third Classes of representations as established by me, just as the mediæval dispute between Realists and Nominalists rested upon the misapprehension of this relation with reference to the Second Class.

§ 42. *The Subject of Volition.*

According to what has preceded, the Subject of knowledge can never be known; it can never become Object or representation. Nevertheless, as we have not only an outer self-knowledge (in sensuous perception), but an inner one also; and as, on the other hand, every knowledge, by its very nature, presupposes a knower and a known, what is known within us as such, is not the knower, but the willer, the Subject of Volition: the Will. Starting from knowledge, we may assert that "I know" is an analytical, "I will," on the contrary, a synthetical, and moreover an *à posteriori* proposition, that is, it is given by experience—in this case by inner experience (*i.e.*, in Time alone). In so far therefore the Subject of volition would be an Object for us. Introspection always shows us to ourselves as *willing*. In this *willing*, however, there are numerous degrees, from the faintest wish to passion, and I have often shown[1] that not only all our emotions, but even all those movements of our inner man, which are subsumed under the wide conception of feeling, are states of the will.

---

[1] See "Die beiden Grundprobleme der Ethik," p. 11, and in several other places.

Now, the identity of the willing with the knowing Subject, in virtue of which the word "I" includes and designates both, is the *nodus*[1] of the Universe, and therefore inexplicable. For we can only comprehend relations between Objects; but two Objects never can be one, excepting as parts of a whole. Here, where the Subject is in question, the rules by which we know Objects are no longer applicable, and actual identity of the knower with what is known as willing—that is, of Subject and Object—is *immediately given.* Now, whoever has clearly realized the utter impossibility of explaining this identity, will surely concur with me in calling it the miracle *κατ' εζοχήν.*

Just as the Understanding is the subjective correlate to our First Class of representations, the Reason to the Second, and pure Sensibility to the Third, so do we find that the correlate to this Fourth Class is the inner sense, or Self-consciousness in general.

§ 43. *Willing. The Law of Motives (Motivation).*

It is just because the willing Subject is immediately given in self-consciousness, that we are unable further to define or to describe what willing is; properly speaking, it is the most direct knowledge we have, nay, one whose immediateness must finally throw light upon every other knowledge, as being very mediate.

At every resolution that we take ourselves, or that we see others take, we deem ourselves justified in asking, why? That is, we assume that something must have previously occurred, from which this resolution has resulted, and we call this something its reason, or, more correctly, the motive of the action which now follows. Without such a reason or motive, the action is just as inconceivable for us, as the movement of a lifeless body without being pushed or pulled. Motives therefore belong to causes, and have also been already numbered and characterized among them in 53, f. § 20, as the third form of Causality. But all Causality is only the form of the Principle of Sufficient Reason in the First Class of Objects: that is, in the corporeal world given us in external perception. There it forms the link which connects changes one with another, the cause being that which, coming from outside, conditions each occurrence. The inner nature of such occurrences on the contrary continues to be a mystery for us: for we always remain on the outside. We certainly see this cause necessarily produce that effect; but we do not learn how it is actually enabled to do so, or what is going on inside. Thus we see mechanical, physical, chemical effects, as well as those brought about by *stimuli*, in each instance follow from their respective causes without on that account ever completely understanding the process, the essential part of which remains a mystery for us; so we attribute it to qualities of bodies, to forces of Nature, or to vital energy, which, however, are all *qualitates occultæ.* Nor should we be at all better off as to comprehension of the movements and actions of animals and of human beings, which would also appear to us as induced in some unaccountable way by their causes (motives), were it not that here we are granted an insight into the inward part of the process; we know, that is, by our own inward experience, that this is an act of the will called forth by the motive, which consists in a mere representation. Thus the effect produced by the motive, unlike that produced by all other causes, is not only known by us from outside, in a merely indirect way, but at the same time from inside, quite directly, and therefore according to its whole mode of action. Here we stand as it were behind the scenes, and learn the secret of the process by which cause produces effect in its most inward nature; for here our knowledge comes to us through a totally different channel and in a totally different way. From this results the important proposition: *The action of motives (motivation) is causality seen from within.* Here accordingly causality presents itself in quite a different way, in quite a different medium, and for quite another kind of knowledge; therefore it must now be exhibited as a special and peculiar form of our principle, which consequently here presents itself as the Principle of the Sufficient Reason of Acting, *principium rationis sufficientis agendi*, or, more briefly, as the *Law of Motives* (*Law of Motivation*).

---

[1] *Weltknoten.*

As a clue to my philosophy in general, I here add, that this Fourth Class of Objects for the Subject, that is, the one object contained in it, the *will* which we apprehend within us, stands in the same relation towards the First Class as the law of motives towards the law of causality, as I have established it in § 20. This truth is the cornerstone of my whole Metaphysic.

As to the way in which, and the necessity with which, motives act, and as to the dependence of their action upon empirical, individual character, and even upon individual capacity for knowledge, &c. &c., I refer my readers to my Prize-essay on the Freedom of the Will, in which I have treated all this more fully.

§ 44. *Influence of the Will over the Intellect.*

It is not upon causality proper, but upon the identity of the knowing with the willing Subject, as shown in § 42, that the influence is based, which the will exercises over the intellect, when it obliges it to repeat representations that have once been present to it, and in general to turn its attention in this or that direction and evoke at pleasure any particular series of thoughts. And even in this, the will is determined by the law of motives, in accordance with which it also secretly rules what is called the association of ideas, to which I have devoted a separate chapter (the 14th) in the second volume of my chief work. This association of ideas is itself nothing but the application of the Principle of Sufficient Reason in its four forms to the subjective train of thought; that is, to the presence of representations in our consciousness. But it is the will of the individual that sets the whole mechanism in motion, by urging the intellect, in accordance with the interest, *i.e.*, the individual aims, of the person, to recall, together with its present representations, those which either logically or analogically, or by proximity in Time or Space, are nearly related to them. The will's activity in this, however, is so immediate, that in most cases we have no clear consciousness of it; and so rapid, that we are at times even unconscious of the occasion which has thus called forth a representation. In such cases, it appears as if something had come into our consciousness quite independently of all connection with anything else; that this, however, is impossible, is precisely the Root of the Principle of Sufficient Reason, which has been fully explained in the above-mentioned chapter of my chief work.[1] Every picture which suddenly presents itself to our imagination, every judgment even that does not follow its previously present reason, must be called forth by an act of volition having a motive; although that motive may often escape our perception owing to its insignificance, and although such acts of volition are often in like manner unperceived, because they take place so easily, that wish and fulfilment are simultaneous.

---

[1] See "Die Welt, a. W. u. V." vol. ii. ch. XIV.

§ 45. *Memory.*

That peculiar faculty of the knowing Subject which enables it to obey the will the more readily in repeating representations, the oftener they have already been present to it—in other words, its capacity for being exercised—is what we call *Memory*. I cannot agree with the customary view, by which it is looked upon as a sort of store-house in which we keep a stock of ready-made representations always at our disposal, only without being always conscious of their possession. The voluntary repetition of representations which have once been present becomes so easy through practice, that one link in a series of representations no sooner becomes present to us, than we at once evoke all the rest, often even, as it were, involuntarily. If we were to look for a metaphor for this characteristic quality of our representative faculty (such as that of Plato, who compared it with a soft mass that receives and retains impressions), I think the best would be that of a piece of drapery, which, after having been repeatedly folded in the same folds, at last falls into them, as it were, of its own accord. The body learns by practice to obey the will, and the faculty of representing does precisely the same. A remembrance is not by any means, as the usual view supposes, always the same representation which is, as it were, fetched over and over again from its store-house; a new one, on the contrary, arises each time, only practice makes this especially easy. Thus it comes to pass that pictures of our imagination, which we fancy we have stowed away in our memory, become imperceptibly modified: a thing which we realize when we see some familiar object again after a long time, and find that it no longer completely corresponds to the image we bring with us. This could not be if we retained ready-made representations. It is just for this reason too, that acquired knowledge, if left unexercised, gradually fades from our memory, precisely because it was the result of practice coming from habit and knack; thus most scholars, for instance, forget their Greek, and most artists their Italian on their return from Italy. This is also why we find so much difficulty in recalling to mind a name or a line of poetry formerly familiar to us, when we have ceased to think of it for several years; whereas when once we succeed in remembering it, we have it again at our disposal for some time, because the practice has been renewed. Everyone therefore who knows several languages, will do well to make a point of reading occasionally in each, that he may ensure to himself their possession.

This likewise explains why the surroundings and events of our childhood impress themselves so deeply on our memory; it is because, in childhood we have but few, and those chiefly intuitive, representations: so that we are induced to repeat them constantly for the sake of occupation. People who have little capability for original thought do this all their lives (and moreover not only with intuitive representations, but with conceptions and words also); sometimes therefore they have remarkably good memories, when obtuseness and sluggishness of intellect do not act as impediments. Men of genius, on the contrary, are not always endowed with the best of memories, as, for instance, Rousseau has told us of himself. Perhaps this may be accounted for by their great abundance of new thoughts and combinations, which leaves them no time for frequent repetition. Still, on the whole, genius is seldom found with a very bad memory; because here a greater energy and mobility of the whole thinking faculty makes up for the want of constant practice. Nor must we forget that Mnemosyne was the mother of the Muses. We may accordingly say, that our memory stands under two contending influences, that of the energy of the representative faculty on the one hand, and that of the quantity of representations occupying that faculty on the other. The less energy there is in the faculty, the fewer must be the representations, and conversely. This explains the impaired memory of habitual novel-readers, for it is with them as with men of genius: the multitude of representations following rapidly upon each other, leaves no time or patience for repetition and practice; only, in novels, these representations are not the readers' own, but other people's thoughts and combinations quickly succeeding each other, and the readers themselves are wanting in that which, in genius, counterbalances repetition. The whole thing besides is subject to the corrective, that we all have most memory for that which interests us, and least for that which does not. Great minds therefore are apt to forget in an incredibly short time the petty affairs and trifling occurrences of daily life and the commonplace people with whom they come in contact, whereas they have a wonderful recollection of those things which have importance in themselves and for them.

It is, however, on the whole, easy to understand that we should more readily remember such series of representations as are connected together by the thread of one or more of the above-mentioned species of reasons and consequences, than such as have no connection with one another, but only with our will according to the law of motives; that is to say, those which are arbitrarily grouped. For, in the former, the fact that we know the formal part *à priori*, saves us half the trouble; and this probably gave rise to Plato's doctrine, that all learning is mere remembering.

As far as possible we ought to try and reduce all that we wish to incorporate in our memory to a perceptible image, either directly, or as an example, a mere simile, or an analogue, or indeed in any other way; because intuitive perceptions take a far firmer hold than any abstract thoughts, let alone mere words. This is why we remember things we have ourselves experienced so much better than those of which we read.

CHAPTER VIII.

GENERAL OBSERVATIONS AND RESULTS.

§ 46. *The Systematic Order.*

THE order of succession in which I have stated the various forms of the Principle of Sufficient Reason in this treatise, is not systematic; it has been chosen for the sake of greater clearness, in order first to present what is better known and least presupposes the rest. In this I have followed Aristotle's rule: *καὶ μαθήσεως οὐκ ἀπὸ τοῦ πρώτου, καὶ τῆς τοῦ πράγματος ἀρχῆς ἐνίοτε ἀρκτέον, ἀλλ' ὅθεν ῥᾷστ' ἂν μάθοι* (*et doctrina non a primo, ac rei principio aliquando inchoanda est, sed unde quis facilius discat*).[1] But the systematic order in which the different classes of reasons ought to follow one another is the following. First of all should come The Principle of Sufficient Reason of Being; and in this again first its application to Time, as being the simple schema containing only what is essential in all the other forms of the Principle of Sufficient Reason, nay, as being the prototype of all finitude. The Reason of Being in Space having next been stated, the Law of Causality would then follow; after which would come the Law of Motives, and last of all the Principle of Sufficient Reason of Knowing; for the other classes of reasons refer to immediate representations, whereas this last class refers to representations derived from other representations.

---

[1] Aristot. "Metaph." iv. 1. "Sometimes too, learning must start, not from what is really first and with the actual beginning of the thing concerned, but from where it is easiest to learn." [Tr.'s add.]

The truth expressed above, that Time is the simple schema which merely contains the essential part of all the forms of the Principle of Sufficient Reason, explains the absolutely perfect clearness and precision of Arithmetic, a point in which no other science can compete with it. For all sciences, being throughout combinations of reasons and consequences, are based upon the Principle of Sufficient Reason. Now, the series of numbers is the simple and only series of reasons and consequences of Being in Time; on account of this perfect simplicity—nothing being omitted, no indefinite relations left—this series leaves nothing to be desired as regards accuracy, apodeictic certainty and clearness. All the other sciences yield precedence in this respect to Arithmetic; even Geometry: because so many relations arise out of the three dimensions of Space, that a comprehensive synopsis of them becomes too difficult, not only for pure, but even for empirical intuition; complicated geometrical problems are therefore only solved by calculation; that is, Geometry is quick to resolve itself into Arithmetic. It is not necessary to point out the existence of sundry elements of obscurity in the other sciences.

§ 47. *Relation in Time between Reason and Consequence.*

According to the laws of causality and of motivation, a reason must precede its consequence in Time. That this is absolutely essential, I have shown in my chief work, to which I here refer my readers [1] in order to avoid repeating myself. Therefore, if we only bear in mind that it is not one thing which is the cause of another thing, but one state which is the cause of another state, we shall not allow ourselves to be misled by examples like that given by Kant,[1] that the stove, which is the cause of the warmth of the room, is simultaneous with its effect. The state of the stove: that is, its being warmer than its surrounding medium, must precede the communication of its surplus caloric to that medium; now, as each layer of air on becoming warm makes way for a cooler layer rushing in, the first state, the cause, and consequently also the second, the effect, are renewed until at last the temperature of stove and room become equalized. Here therefore we have no permanent cause (the stove) and permanent effect (the warmth of the room) as simultaneous things, but a chain of changes; that is, a constant renewing of two states, one of which is the effect of the other. From this example, however, it is obvious that even Kant's conception of Causality was far from clear.

---

[1] See "Die Welt a. W. u. V.," vol. ii. ch. iv. p. 41, 42 of the 2nd edition, and p. 44 of the 3rd.

On the other hand, the Principle of Sufficient Reason of Knowing conveys with it no relation in Time, but merely a relation for our Reason: here therefore, *before* and *after* have no meaning.

In the Principle of Sufficient Reason of Being, so far as it is valid in Geometry, there is likewise no relation in Time, but only a relation in Space, of which we might say that all things were co-existent, if here the words coexistence and succession had any meaning. In Arithmetic, on the contrary, the Reason of Being is nothing else but precisely the relation of Time itself.

§ 48. *Reciprocity of Reasons.*

Hypothetical judgments may be founded upon the Principle of Sufficient Reason in each of its significations, as indeed every hypothetical judgment is ultimately based upon that principle, and here the laws of hypothetical conclusions always hold good: that is to say, it is right to infer the existence of the consequence from the existence of the reason, and the non-existence of the reason from the non-existence of the consequence; but it is wrong to infer the non-existence of the consequence from the non-existence of the reason, and the existence of the reason from the existence of the consequence. Now it is singular that in Geometry we are nevertheless nearly always able to infer the existence of the reason from the existence of the consequence, and the non-existence of the consequence from the non-existence of the reason. This proceeds, as I have shown in § 37, from the fact that, as each line determines the position of the rest, it is quite indifferent which we begin at: that is, which we consider as the reason, and which as the consequence. We may easily convince ourselves of this by going through the whole of the geometrical theorems. It is only where we have to do not only with figures, *i.e.*, with the positions of lines, but with planes independently of figures, that we find it in most cases impossible to infer the existence of the reason from the existence of the consequence, or, in other words, to convert the propositions by making the condition the conditioned. The following theorem gives an instance of this: Triangles whose lengths and bases are equal, include equal areas. This cannot be converted as follows: Triangles whose areas are equal, have likewise equal bases and lengths; for the lengths may stand in inverse proportion to the bases.

---

[1] Kant, "Krit. d. r. Vern.," 1st edition, p. 202; 5th edition, p. 248 (English translation by M. Müller, p. 177.)

In § 20 it has already been shown, that the law of causality does not admit of reciprocity, since the effect never can be the cause of its cause; therefore the conception of reciprocity is, in its right sense, inadmissible. Reciprocity, according to the Principle of Sufficient Reason of knowing, would only be possible between equivalent conceptions, since the spheres of these alone cover each other mutually. Apart from these, it only gives rise to a vicious circle.

§ 49. *Necessity.*

The Principle of Sufficient Reason in all its forms is the sole principle and the sole support of all necessity. For *necessity* has no other true and distinct meaning than that of the infallibility of the consequence when the reason is posited. Accordingly every necessity is *conditioned:* absolute, *i.e.*, unconditioned, necessity therefore is a *contradicto in adjecto.* For *to be necessary* can never mean anything but to result from a given reason. By defining it as "what cannot not be," on the other hand, we give a mere verbal definition, and screen ourselves behind an extremely abstract conception to avoid giving a definition of the thing. But it is not difficult to drive us from this refuge by inquiring how the non-existence of anything can be possible or even conceivable, since all existence is only given empirically. It then comes out, that it is only possible so far as some *reason* or other is posited or present, from which it follows. To be necessary and to follow from a given reason, are thus convertible conceptions, and may always, as such, be substituted one for the other. The conception of an "ABSOLUTELY *necessary Being*" which finds so much favour with pseudo-philosophers, contains therefore a contradiction: it annuls by the predicate "*absolute*" (*i.e.*, "unconditioned by anything else") the only determination which makes the "*necessary*" conceivable. Here again we have an instance of the *improper use of abstract conceptions* to play off a metaphysical artifice such as those I have already pointed out in the conceptions "*immaterial substance*," "*cause in general*," "*absolute reason*,"

&c. &c.[1] I can never insist too much upon all abstract conceptions being checked by *perception*.

There exists accordingly a *fourfold* necessity, in conformity with the *four* forms of the Principle of Sufficient Reason:—

1°. *Logical necessity*, according to the principle of sufficient reason of knowing, in virtue of which, when once we have admitted the premisses, we must absolutely admit the conclusion.

2°. *Physical necessity*, according to the law of causality, in virtue of which, as soon as the cause presents itself, the effect must infallibly follow.

3°. *Mathematical necessity*, according to the principle of sufficient reason of being, in virtue of which, every relation which is stated in a true geometrical theorem, is as that theorem affirms it to be, and every correct calculation remains irrefutable.

4°. *Moral necessity*, in virtue of which, every human being, every animal even, is *compelled*, as soon as a motive presents itself, to do that which alone is in accordance with the inborn and immutable character of the individual. This action now follows its cause therefore as infallibly as every other effect, though it is less easy here to predict what that effect will be than in other cases, because of the difficulty we have in fathoming and completely knowing the individual empirical character and its allotted sphere of knowledge, which is indeed a very different thing from ascertaining the chemical properties of a neutral salt and predicting its reaction. I must repeat this again and again on account of the dunces and blockheads who, in defiance of the unanimous authority of so many great thinkers, still persist in audaciously maintaining the contrary, for the benefit of their old woman's philosophy. I am not a professor of philosophy, forsooth, that I need bow to the folly of others.

---

[1] Compare "Die Welt a. W. u. V.," vol. i. p. 551 *et seq.* of the 2nd edition (i. p. 582 *et seq.* of 3rd edition) as to "immaterial substance," and § 52 of the present work as to "reason in general." (Editor's note.)

§ 50. *Series of Reasons and Consequences.*

According to the law of causality, the condition is itself always conditioned, and, moreover, conditioned in the same way; therefore, there arises a series *in infinitum a parte ante.* It is just the same with the Reason of Being in Space: each relative space is a figure; it has its limits, by which it is connected with another relative space, and which themselves condition the figure of this other, and so on throughout all dimensions *in infinitum.* But when we examine a single figure in itself, the series of reasons of being has an end, because we start from a given relation, just as the series of causes comes to an end if we stop at pleasure at any particular cause. In Time, the series of reasons of being has infinite extension both *a parte ante,* and *a parte post,* since each moment is conditioned by a preceding one, and necessarily gives rise to the following. Time has therefore neither beginning nor end. On the other hand, the series of reasons of knowledge—that is, a series of judgments, each of which gives logical truth to the other—always ends somewhere, *i.e.*, either in an empirical, a transcendental, or a metalogical truth. If the reason of the major to which we have been led is an empirical truth, and we still continue asking *why,* it is no longer a reason of knowledge that is asked for, but a cause—in other words, the series of reasons of knowing passes over into the series of reasons of becoming. But if we do the contrary, that is, if we allow the series of reasons of becoming to pass over into the series of reasons of knowing, in order to bring it to an end, this is never brought about by the nature of the thing, but always by a special purpose: it is therefore a trick, and this is the sophism known by the name of the Ontological Proof. For when a cause, at which it seems desirable to stop short in order to make it the *first* cause, has been reached by means of the Cosmological Proof, we find out that the law of causality is not so easily brought to a standstill, and still persists in asking *why*: so it is simply set aside and the principle of sufficient reason of knowing, which from a distance resembles it, is substituted in its stead; and thus a reason of knowledge is given in the place of the cause which had been asked for—a reason of knowledge derived from the conception itself which has to be demonstrated, the reality of which is therefore still problematical: and this reason, as after all it is one, now has to figure as a cause. Of course the conception itself has been previously arranged for this purpose, and reality slightly covered with a few husks just for decency's sake has been placed within it, so as to give the delightful surprise of finding it there—as has been shown in Section 7. On the other hand, if a chain of judgments ultimately rests upon a principle of transcendental or of metalogical truth, and we still continue to ask *why*, we receive no answer at all, because the question has no meaning, *i.e.*, it does not know what kind of reason it is asking for.

For the Principle of Sufficient Reason is the *principle of all explanation: to explain a thing* means, to reduce its given existence or connection to some form or other of the Principle of Sufficient Reason, in accordance with which form that existence or connection necessarily is that which it is. The Principle of Sufficient Reason itself, *i.e.*, the connection expressed by it in any of its forms, cannot therefore be further explained; because there exists no principle by which to explain the source of all explanation: just as the eye is unable to see itself, though it sees everything else. There are of course series of motives, since the resolve to attain an end becomes the motive for the resolve to use a whole series of means; still this series invariably ends *à parte priori* in a representation belonging to one of our two first classes, in which lies the motive which originally had the power to set this individual will in motion. The fact that it was able to do this, is a datum for knowing the empirical character here given, but it is impossible to answer the question why that particular motive acts upon that particular character; because the intelligible character lies outside Time and never becomes an Object. Therefore the series of motives, as such, finds its termination in some such final motive and, according to the nature of its last link, passes into the series of causes, or that of reasons of knowledge: that is to say, into the former, when that last link is a real object; into the latter, when it is a mere conception.

§ 51. *Each Science has for its Guiding Thread one of the Forms of the Principle of Sufficient Reason in preference to the others.*

As the question *why* always demands a sufficient reason, and as it is the connection of its notions according to the principle of sufficient reason which distinguishes science from a mere aggregate of notions, we have called that *why* the parent of all science (§ 4). In each science, moreover, we find one of the forms of that principle predominating over the others as its guiding-thread. Thus in pure Mathematics the reason of being is the chief guiding-thread (although the exposition of the proofs proceeds according to the reason of knowing only); in applied Mathematics the law of causality appears together with it, but in Physics, Chemistry, Geology, &c., that law entirely predominates. The principle of sufficient reason in knowing finds vigorous application throughout all the sciences, for in all of them the particular is known through the general; but in Botany, Zoology, Mineralogy, and other classifying sciences, it is the chief guide and predominates absolutely. The law of motives (*motivation*) is the chief guide in History, Politics, Pragmatic Psychology, &c. &c., when we consider all motives and maxims, whatever they may be, as data for explaining actions—but when we make those motives and maxims the object-matter of investigation from the point of view of their value and origin, the law of motives becomes the guide to Ethics. In my chief work will be found the highest classification of the sciences according to this principle.[1]

§ 52. *Two principal Results.*

I have endeavoured in this treatise to show that the Principle of Sufficient Reason is a common expression for four completely different relations, each of which is founded upon a particular law given *à priori* (the principle of sufficient reason being a synthetical *à priori* principle). Now, according to the principle of *homogeneity*, we are compelled to assume that these four laws, discovered according to the principle of specification, as they agree in being expressed by one and the same term, must necessarily spring from one and the same original quality of our whole cognitive faculty as their common root, which we should accordingly have to look upon as the innermost germ of all dependence, relativeness, instability and limitation of the objects of our consciousness—itself limited to Sensibility, Understanding, Reason, Subject and Object—or of that world, which the divine Plato repeatedly degrades to the ἀεὶ γιγνόμενον μὲν

---

[1] "Die Welt a. W. u. V.," vol. ii. ch. 12, p. 126 of the 2nd edition (p. 139 of the 3rd edition).

καὶ ἀπολλύμενον, ὄντως δὲ οὐδέποτε ὄν (ever arising and perishing, but in fact never existing), the knowledge of which is merely a *δόξα μετ' αἰσθήσεως ἀλόγου*, and which Christendom, with a correct instinct, calls *temporal*, after that form of our principle (Time) which I have defined as its simplest schema and the prototype of all limitation. The general meaning of the Principle of Sufficient Reason a may, in the main, be brought back to this: that every thing existing no matter when or where, exists *by reason of* b *something else.* Now, the Principle of Sufficient Reason is nevertheless *à priori* in all its forms: that is, it has its root in our intellect, therefore it must not be applied to the totality of existent things, the Universe, including that intellect in which it presents itself. For a world like this, which presents itself in virtue of *à priori* forms, is just on that account mere phenomenon; consequently that which holds good with reference to it as the result of these forms, cannot be applied to the world itself, *i.e.* to the thing in itself, representing itself in that world. Therefore we cannot say, "the world and all things in it exist by reason of something else;" and this proposition is precisely the Cosmological Proof.

If, by the present treatise, I have succeeded in deducing the result just expressed, it seems to me that every speculative philosopher who founds a conclusion upon the Principle of Sufficient Reason or indeed talks of a reason at all, is bound to specify which kind of reason he means. One might suppose that wherever there was any question of a reason, this would be done as a matter of course, and that all confusion would thus be impossible. Only too often, however, do we still find either the terms reason and cause confounded in indiscriminate use; or do we hear basis and what is based, condition and what is conditioned, *principia* and *principiata* talked about in quite a *general* way without any nearer determination, perhaps because there is a secret consciousness that these conceptions are being used in an unauthorized way. Thus even Kant speaks of the thing in itself as the *reason*[1] of the phenomenon, and also of a *ground* of the *possibility* of all phenomena,[2] of an *intelligible cause* of phenomena, of an *unknown ground* of the possibility of the sensuous series in general, of a *transcendental object*[3] as the *ground* of all phenomena and of the *reason* why our sensibility should have this rather than all other supreme conditions, and so on in several places. Now all this does not seem to me to tally with those weighty, profound, nay immortal words of his,[4] "the contingency[5] of things is itself mere phenomenon, and can lead to no other than the empirical regressus which determines phenomena."

That since Kant the conceptions reason and consequence, *principium* and *principiatum*, &c. &c., have been and still are used in a yet more indefinite and even quite transcendent sense, everyone must know who is acquainted with the more recent works on philosophy.

The following is my objection against this promiscuous employment of the word *ground* (reason) and, with it, of the Principle of Sufficient Reason in general; it is likewise the second result, intimately connected with the first, which the present treatise gives concerning its subject-matter proper. The four laws of our cognitive faculty, of which the Principle of Sufficient Reason is the common expression, by their common character as well as by the fact that all Objects for the Subject are divided amongst them, proclaim themselves to be posited by one and the same primary quality and inner peculiarity of our knowing faculty, which faculty manifests itself as Sensibility, Understanding, and Reason. Therefore, even if we imagined it to be possible for a new Fifth Class of Objects to come about, we should in that case likewise have to assume that the Principle of Sufficient Reason would appear in this class also under a different form. Notwithstanding all this, we still have no right to talk of an *absolute reason* (ground), nor does a *reason in general*, any more than a *triangle in general*, exist otherwise than as a conception derived by means of discursive reflection, nor is this conception, as a representation drawn from other representations, anything more than a means of thinking several things in one. Now, just as every triangle must be either acute-angled, right-angled, or obtuse-angled, and either equilateral, isosceles or scalene, so also must every reason belong to one or other of the four possible kinds of reasons I have pointed out. Moreover, since we have only four well-distinguished Classes of Objects, every reason must also belong to one or other of these four, and no further Class being possible, Reason itself is forced to rank it within them; for as soon as we employ a reason, we presuppose the Four Classes as well as the faculty of representing (*i.e.* the whole world), and must hold ourselves within these bounds, never transcending them. Should others, however, see this in a different light and opine that a *reason in general* is anything but a conception, derived from the four kinds of reasons, which expresses what they all have in common, we might revive the controversy of the Realists and Nominalists, and then I should side with the latter.

---

[1] Or *ground*.

[2] Kant, "Krit. d. r. Vern.," 1st edition, pp. 561, 562, 564; p. 590 of the 5th edition. (Pp. 483 to 486 of the English translation by M. Müller.)

[3] *Ibid.* p. 540 of 1st edition, and 641 of 5th edition. (P. 466 of English translation.)

[4] *Ibid.* p. 563 of the 1st and 591 of the 5th edition. (P. 485 of English translation.)

[5] Empirical contingency is meant, which, with Kant, signifies as much as dependence upon other things. As to this, I refer my readers to my censure in my "Critique of Kantian Philosophy," p. 524 of the 2nd, and p. 552 of the 3rd edition.

ON THE WILL IN NATURE.

AN ACCOUNT OF THE CORROBORATIONS RECEIVED BY THE AUTHOR'S PHILOSOPHY

SINCE ITS FIRST APPEARANCE

FROM THE EMPIRICAL SCIENCES.

BY

ARTHUR SCHOPENHAUER.

Translated from the Fourth Edition published by JULIUS FRAUENSTÄDT.

Τοιαῦτ' ἐμοῦ λόγοισιν ἐξηγουμένου,
Οὐκ ἠξίωσαν οὐδὲ προσβλέψαι τὸ πᾶν·
'Αλλ' ἐκδιδάσκει πάνθ' ὁ γηράσκων χρόνος.
AESCH.

PREFACE TO THE SECOND EDITION.

TO my great joy I have lived to revise even this little work, after a lapse of nineteen years, and that joy is enhanced by the special importance of this treatise for my philosophy. For, starting from the purely empirical, from the observations of unbiassed physical investigators—themselves following the clue of their own special sciences—I here immediately arrive at the very kernel of my Metaphysic; I establish its points of contact with the physical sciences and thus corroborate my fundamental dogma, in a sense, as the arithmetician proves a sum: for by this I not only confirm it more closely and specially, but even make it more clearly, easily, and rightly understood than anywhere else.

The improvements in this new edition are confined almost entirely to the Additions; for scarcely anything that is worth mentioning in the First Edition has been left out, while I have inserted many and, in some cases, important new passages.

But, even in a general sense, it may be looked upon as a good sign, that a new edition of the present treatise should have been found necessary; since it shows that there is an interest in serious philosophy and confirms the fact that the necessity for real progress in this direction is now more strongly felt than ever. This is based upon two circumstances. The first is the unparalleled zeal and activity displayed in every branch of Natural Science which, as this pursuit is mostly in the hands of people who have learned nothing else, threatens to lead to a gross, stupid Materialism, the *more immediately* offensive side of which is less the moral bestiality of its ultimate results, than the incredible absurdity of its first principles; for by it even vital force is denied, and organic Nature is degraded to a mere chance play of chemical forces.[1] These knights of the crucible and retort should be made to understand, that the mere study of Chemistry qualifies a man to become an apothecary, but not a philosopher. Certain other like-minded investigators of Nature, too, must be taught, that a man may be an accomplished zoologist and have the sixty species of monkeys at his fingers' ends, yet on the whole be an ignoramus to be classed with the vulgar, if he has learnt nothing else, save perhaps his school-catechism. But in our time this frequently happens. Men set themselves up for enlighteners of mankind, who have studied Chemistry, or Physics, or Mineralogy and nothing else under the sun; to this they add their only knowledge of any other kind, that is to say, the little they may remember of the doctrines of the school-catechism, and when they find that these two elements will not harmonize, they straightway turn scoffers at religion and soon become shallow and absurd materialists.[2] They may perhaps have heard at college of the existence of a Plato and an Aristotle, of a Locke, and especially of a Kant; but as these folk never handled crucibles and retorts or even stuffed a monkey, they do not esteem them worthy of further acquaintance. They prefer calmly to toss out of the window the intellectual labour of two thousand years and treat the public to a philosophy concocted out of their own rich mental resources, on the basis of the catechism on the one hand, and on that of crucibles and retorts or the catalogue of monkeys on the other. They ought to be told in plain language that they are ignoramuses, who have much to learn before they can be allowed to have any voice in the matter. Everyone, in fact, who dogmatizes at random, with the *naïve* realism of a child on such arguments as God, the soul, the world's origin, atoms, &c. &c. &c., as if the Critique of Pure Reason had been written in the moon and no copy had found its way to our planet—is simply one of the vulgar. Send him into the servants' hall, where his wisdom will best find a market.[1]

---

[1] And this infatuation has reached such a point, that people seriously imagine themselves to have found the key to the mystery of the essence and existence of this wonderful and mysterious world in wretched *chemical affinities!* Compared with this illusion of our physiological chemists, that of the alchymists who sought after the philosopher's stone, and only hoped to find out the secret of making gold, was indeed a mere trifle. [Add. to 3rd ed.]

[2] "*Aut catechismus, aut materialismus,*" is their watchword. [Add. to 3rd ed.]

The other circumstance which calls for a real progress in philosophy, is the steady growth of unbelief in the face of all the hypocritical dissembling and the outward conformity to the Church. This unbelief necessarily and unavoidably goes hand in hand with the growing expansion of empirical and historical knowledge. It threatens to destroy not only the form, but even the spirit of Christianity (a spirit which has a much wider reach than Christianity itself), and to deliver up mankind to *moral* materialism—a thing even more dangerous than the chemical materialism already mentioned. And nothing plays more into the hands of this unbelief, than the Tartuffianism *de rigueur* impudently flaunting itself everywhere just now, whose clumsy disciples, fee in hand, hold forth with such unction and emphasis, that their voices penetrate even into learned, critical reviews issued by Academies and Universities, and into physiological as well as philosophical books, where however, being quite in their wrong place, they only damage their own cause by rousing indignation.[1] Under such circumstances as these, it is gratifying to see the public betray an interest in philosophy.

---

[1] There too he will meet with people who fling about words of foreign origin, which they have caught up without understanding them, just as readily as he does himself, when he talks about "*Idealism*" without knowing what it means, mostly therefore using the word instead of Spiritualism (which being Realism, is the opposite to Idealism). Hundreds of examples of this kind besides other *quid pro quos* are to be found in books, and critical periodicals. [Add. to 3rd ed.]

I have nevertheless one sad piece of news to communicate to our professors of philosophy. Their Caspar Hauser (according to Dorguth) whom they had so carefully secreted, so securely walled up for nearly forty years, that no sound could betray his existence to the world—their Caspar Hauser—I say, has escaped! He has escaped and is running about in the world;—some even say he is a prince. In plain language, the misfortune they feared more than anything has come to pass after all. In spite of their having done their best to prevent it for more than a generation by acting with united force, with rare constancy, secreting and ignoring to a degree that is without example, my books are beginning and henceforth will continue to be read. *Legor et legar:* there is no help for it. This is really dreadful and most inopportune; nay, it is a positive fatality, not to say calamity. Is this the recompense for all their faithful, snug secrecy; for having held so firmly and unitedly together? Poor time-servers! What becomes of Horace's assurance:—

> "Est et fideli tuta silentio
> Merces, —— ?"

For verily they have not been deficient in faithful reticence; rather do they excel in this quality wherever they scent merit. And, after all, it is no doubt the cleverest artifice; for what no one knows, is as though it did not exist. Whether the *merces* will remain quite so *tuta*, seems rather doubtful—unless we are to take *merces* in a *bad* sense; and for this the support of many a classical authority might certainly be found. These gentlemen had seen quite rightly that the only means to be used against my writings, was to secrete them from the public by maintaining profound silence concerning them, while they kept up a loud noise at the birth of every misshapen offspring of professorial philosophy; as the voice of the new-born Zeus was drowned in days of yore by the clashing of the cymbals of the Corybantes. But this expedient is now used up; the secret is out—the public has discovered me. The rage of our professors of philosophy at this is great, but powerless; for their only effective resource, so long successfully employed, being exhausted, no snarling can avail any longer against my influence, and in vain do they now take this, or that, or the other attitude. They have certainly succeeded, so far as the generation which was properly speaking contemporaneous with my philosophy, went to the grave in ignorance of it. But this was a mere postponement, and Time has kept its word, as it always does.

---

[1] They ought everywhere to be shown that their belief is not believed in. [Add. to 3rd ed.]

Now there are two reasons why these gentlemen "in the philosophical trade"—as they call themselves with incredible *naïveté*—hate my philosophy. The first of them is, that my writings spoil the taste of the public for tissues of empty phrases, for accumulations of unmeaning words piled one upon another, for hollow, superficial, brain-racking twaddle, for Christian dogmatics under the disguise of the most wearisome Metaphysics, for systematized Philistinism of the flattest kind made to represent Ethics and even accompanied by instructions for card-playing and dancing—in short, they unfit my readers for the whole method of philosophising *à la vieille femme*, which has scared so many for ever from the pursuit of philosophy.

The second reason is, that our gentlemen "in the trade" are absolutely bound in conscience not to let my philosophy pass and are therefore debarred from using it for the benefit of "the trade;"—and this they even heartily regret; for my abundance might have been admirably turned to account for the benefit of their own needy poverty. But even if it contained the greatest hoards of human wisdom ever unearthed, my doctrine could never find favour with them either now or in the future; for it is absolutely wanting in all Speculative Theology and Rational Psychology, and these, just these, are the very breath of life to these gentlemen, the *sine qua non* of their existence. For they are anxious before all things in heaven and on earth, to hold their official appointments, and these appointments demand before all things in heaven and on earth a Speculative Theology and a Rational Psychology: *extra hæc non datur salus.* Theology there must and shall be, no matter whence it come; Moses and the Prophets must be made out to be in the right: this is the highest principle in philosophy; and there must be Rational Psychology to boot, as is proper. Now there is nothing of the sort to be found either in Kant's philosophy or in mine. For, as we all know, the most cogent theological argumentation shivers to atoms like a glass thrown at a wall, when it is brought into contact with Kant's Critique of all Speculative Theology, and under his hands not a shred remains entire of the whole tissue of Rational Psychology! As to myself, being the bold continuer of Kant's philosophy, I have entirely done away with all Speculative Theology and all Rational Psychology, as is only consistent and honest.[1] On the other hand, the task incumbent upon University

---

[1] For revelation goes for nothing in philosophy; therefore a philosopher must before all things be an unbeliever. [Add. to 3rd. ed.].

Philosophy is at bottom this: to set forth the chief fundamental truths belonging to the Catechism under the veil of some very abstract, abstruse and difficult, therefore painfully wearisome formulas and sentences; wherefore, however confused, intricate, strange and eccentric the matter may seem at first sight, these truths invariably reveal themselves as its kernel. This proceeding may be useful, though to me it is unknown. All I know is, that philosophy, *i.e.* the search after truth—I mean the truth *κατ᾽ εζοχήν*, by which the most sublime and important disclosures, more precious than anything else to the human race, are understood—will never advance a step, nay, an inch, by means of such manœuvring, by which its course is on the contrary impeded; therefore I found out long ago that University philosophy is the enemy of all genuine philosophy. Now, this being the state of the case, when a really honest philosophy arises, which seriously has truth for its sole aim, must not these gentlemen "of the philosophical trade" feel as might stage-knights in paste-board armour, were a knight suddenly to appear in the midst of them clad in real armour, who made the stage-floor creak under his ponderous tread? Such philosophy as this *must* therefore be bad and false and consequently places these gentlemen "of the trade" under the painful obligation of playing the part of him who, in order to appear what he is not, cannot allow others to pass for what they really are. Out of all this however there unrolls itself the amusing spectacle we enjoy, when these gentlemen, now that ignoring has unfortunately come to an end, after forty years, at last begin to measure me by their own puny standard and pass judgment upon me from the heights of their wisdom, as though they were amply qualified to do so by their office; but they are most amusing of all when they assume airs of superiority towards me.

Their abhorrence of Kant, though less openly expressed, is scarcely less great than their hatred of me; precisely because all speculative Theology and all Rational Psychology—the bread-winners of these gentlemen—have been undermined, not to say irrevocably ruined, by him in the eyes of all serious thinkers. What! Not hate him? him, who has made their "trade in philosophy" so difficult to them, that they hardly see how to pull through honourably! So Kant and I are accordingly both bad, and these gentlemen quite overlook us. For nearly forty years they have not deigned to cast a glance upon me, and now they look down condescendingly upon Kant from the heights of their wisdom, smiling in pity at his errors. This policy is both very wise and very profitable; since they are thus able to hold forth at their ease volume after volume upon God and the soul, as if these were personalities with whom they were intimately acquainted, and to discourse upon the relation in which the former stands to the world and the latter to the body, just as if there had never been such a thing as a Critique of Pure Reason. When once the Critique of Pure Reason is done away with, all will go on splendidly! Now it is for this end that they have been endeavouring for many years quietly and gradually to set Kant aside, to make him obsolete, nay, to turn up their noses at him, and one being encouraged by the other in this, they are becoming bolder every day.[1] They have no opposition to fear from their own colleagues, since they all have the same aims and the same mission and all together form a numerous *coterie*, the brilliant members of which, *coram populo*, bow and scrape to each other on all sides. Thus by degrees things have come to such a point, that the wretchedest compilers of manuals have the presumption to treat Kant's grand, immortal discoveries as antiquated errors, nay, calmly to set them aside with the most ludicrous arrogance and most impudent dicta of their own, which they nevertheless lay down under the disguise of argumentation, because they know they may count upon a credulous public, to whom Kant's writings are not known.[1] And this is what happens to Kant on the part of writers, whose total incapacity strikes us in every page, not to say every line, we read of their unmeaning, stupefying verbiage! Were this to go on much longer, Kant would present the spectacle of the dead lion being kicked by the donkey. Even in France there is no lack of fellow-workers inspired by a similar orthodoxy, who are labouring towards the same end. A certain M. Barthélemy de St. Hilaire, for instance, in a lecture delivered in the *Académie des Sciences Morales* in April, 1850, has presumed to criticize Kant with an air of condescension and to use most improper language in speaking of him; luckily however in such a way, that no one could fail to see the underlying purpose.[2]

---

[1] One always says the other is right, so that the public in its simplicity at last imagines them really to be right. [Add. to 3rd ed.]

Now others among our German "traders in philosophy" again try to get rid of the obnoxious Kant in a different way: instead of attacking his philosophy point-blank, they rather seek to undermine the foundations on which it is built. These people however are so utterly forsaken by all the gods and by all power of judgment, that they attack *à priori* truths: that is to say, truths as old as the human understanding, nay, which constitute that understanding itself, and which it is therefore impossible to contradict without declaring war against that understanding also. So great however is the courage of these gentlemen. I am sorry to say I know of three,[1] and I am afraid there are a good many more at work at this undermining process, who have the incredible presumption to maintain the *à posteriori* origin of Space as a consequence, a mere relation, of the objects *within it;* for they assert that Space and Time are of empirical origin and attached to those bodies, so that [according to them] Space first arises through our perception of the juxtaposition of bodies and Time likewise through our perception of the succession of changes (*sancta simplicitas!* as if the words "collateral" and "successive" would have any sense for us without the antecedent intuitions of Space and of Time to give them a meaning); consequently, that if there were no bodies, there would be no Space, therefore if they disappeared Space also must lapse, and that if all changes were to stop, Time also would stop.[2]

---

[1] Here it is especially Ernst Reinhold's "System of Metaphysics" (3rd edition, 1854) that I have in my eye. In my "Parerga" I have explained how it comes, that brain-perverting books like this go through several editions. See "Parerga," vol. i. p. 171 (2nd edition, vol. i. p. 194).

[2] Nevertheless, by Zeus, all such gentlemen, in France as well as Germany, should be taught that Philosophy has a different mission from that of playing into the hands of the clergy. We must let them clearly see before all things that we have no faith in their faith—from this follows what we think of them. [Add. to 3rd ed.]

And such stuff as this is gravely taught fifty years after Kant's death! The aim of it is, as we know, to undermine Kantian philosophy, and certainly if these propositions were true, *one* stroke would suffice to overthrow it. Fortunately however these assertions are of a kind which is met by derision rather than by serious refutation. For, in them, the question is one of heresy, not so much against Kantian philosophy, as against common sense; and they are not so much an attack upon any particular philosophical dogma, as upon an *à priori* truth which, as such, constitutes human understanding itself, and therefore must be instantaneously evident to every one who is in his senses, just as much as that 2 × 2 = 4. Fetch me a peasant from the plough; make the question intelligible to him; and he will tell you, that even if all things in Heaven and on Earth were to vanish, Space would nevertheless remain, and that if all changes in Heaven and on Earth were to cease, Time would nevertheless flow on. Compared with German pseudo-philosophers like these, how estimable does a man like the French physicist Pouillet appear, who. though he never troubles his head about Metaphysics, is careful to incorporate two long paragraphs, one on *l'Espace*, the other on *le Temps*, in the first chapter of his well-known Manual, on which public instruction in France is based, where he shows that if all Matter were annihilated, Space would still remain, and that Space is infinite; and that if all changes ceased, Time would still pursue its course without end. Now here he does not appeal, as in all other cases, to experience, because in this case experience is not possible; yet he speaks with apodeictic certainty. For, as a physicist, professing a science which is absolutely immanent—*i.e.* limited to the reality that is empirically given—it never comes into his head to inquire whence he knows all this. It *did* come into Kant's head, and it was this very problem, clothed by him in the severe form of an inquiry as to the possibility of synthetical *à priori* judgments, that became tne starting-point and the corner-stone of his immortal discoveries, or in other words, of Transcendental Philosophy which, precisely by answering this question and others related to it, shows what is the nature of that empirical reality itself.[1]

---

[1] (*a*) Rosenkranz, "Meine Reform der Hegelschen Philosophie," 1852, especially p. 41, in a pompous, dictatorial tone: "I have explicitly said, that Space and Time would not exist if Matter did not exist. Æther spread out within itself first constitutes real Space, and the movement of this æther and consequent real genesis of everything individual and separate, constitutes real Time." (*b*) L. Noack, "Die Theologie als Religionsphilosophie," 1853, pp. 8, 9. (*c*) V. Reuchlin-Meldegg. Two reviews of Oersted's "Geist in der Natur" in the Heidelberg Annals, Nov.-Dec., 1850, and May-June, 1854.

[2] Time is the condition of the *possibility* of succession, which could neither take place, nor be understood by us and expressed in words, without Time. And Space is likewise the condition of the *possibility* of juxtaposition, and Transcendental Æsthetic is the proof that these conditions have their seat in the constitution of our head. [Add. to 3rd ed.]

And seventy years after the Critique of Pure Reason had appeared and filled the world with its fame, these gentlemen dare to serve up such gross absurdities, which were done away with long ago, and to return to former barbarism. If Kant were to come back and see all this mischief, he would feel like Moses on returning from Mount Sinai, when he found his people worshipping the golden calf, and dashed the Tables to pieces in his anger. But if Kant were to take things as tragically as Moses, I should console him with the words of Jesus Sirach:[2] "He that telleth a tale to a fool speaketh to one in a slumber;

---

[1] In the Scholium to the eighth of the definitions he has placed at the top of his "Principia," Newton quite rightly distinguishes *absolute*, that is, *empty*, from relative, or filled Time, and likewise absolute from relative Space. He says, p. 11: *Tempus, spatium, locum, motum, ut omnibus notissima, non definio. Notandum tamen quod* VULGUS (that is, professors like those I have been mentioning) *quantitates hasce non aliter quam ex relatione ad sensibilia concipiat. Et inde oriuntur praejudicia quaedam, quibus tollendis convenit easdem in absolutas et relativas, veras et apparentes, mathematicas et vulgares distingui.* And again (p. 12):

I. *Tempus absolutum, verum et mathematicum, in se et natura sua sine relatione ad externum quodvis, aequabiliter fluit, alioque nomine dicitur Duratio: relativum, apparens et vulgare est sensibilis et externa quaevis Durationis per motum mensura (seu accurata seu inaequabilis) quâ vulgus vice veri temporis utitur; ut Hora, Dies, Mensis, Annus.*

II. *Spatium absolutum, natura sua sine relatione ad externum quodvis, semper manet similare et immobile: relativum est spatii hujus mensura seu dimensio quaelibet mobilis, quae a sensibus nostris per situm suum ad corpora definitur, et a vulgo pro spatio immobili usurpatur: uti dimensio spatii subterranei, aerei vel coelestis definita per situm suum ad terram.*

But even Newton never dreamt of asking how we know these two infinite entities, Space and Time; since, as he here impresses on us, they do not fall within the range of the senses; and how we know them moreover so intimately, that we are able to indicate their whole nature and rule down to the minutest detail. [Add. to 3rd ed.]

[2] Ecclesiasticus xxii. 8.

when he hath told his tale, he will say, 'What is the matter?'" For that diamond in Kant's crown, Transcendental Æsthetic, never has existed for these gentlemen—it is tacitly set aside, as *non-avenue*. I wonder what they think Nature means by producing the rarest of all her works, a great mind, one among so many hundreds of millions, if the worshipful company of numskulls are to be able at their pleasure and by their mere counter-assertion to annul the weightiest doctrines emanating from that mind, let alone to treat them with disregard and do as if they did not exist.

But this degenerate, barbarous state of philosophy which, in the present day, emboldens every tyro to hold forth at random upon subjects that have puzzled the greatest minds, is precisely a consequence still remaining of the impunity with which—thanks to the connivance of our professors of philosophy—that audacious scribbler, Hegel, has been allowed to flood the market with his monstrous vagaries and so to pass for the greatest of all philosophers for the last thirty years in Germany. Every one of course now thinks himself entitled to serve up confidently anything that may happen to come into his sparrow's brain.

Therefore, as I have said, the gentlemen of the 'philosophical trade' are anxious before all things to obliterate Kant's philosophy, in order to be able to return to the muddy canal of the old dogmatism and to talk at random to their heart's content upon the favourite subjects which are specially recommended to them: just as if nothing had happened and neither a Kant nor a Critical Philosophy had ever come into the world.[1] The affected veneration for, and laudation of, Leibnitz too, which has been showing itself everywhere for some years, proceed from the same source. They like to place him in a line with, nay above, Kant, having at times the assurance to call him the greatest of all German philosophers. Now, compared with Kant, Leibnitz is a poor rushlight. Kant is a master-mind, to whom mankind is indebted for the discovery of never-to-be-forgotten truths. One of his chief merits is precisely, to have delivered us from Leibnitz and his subtleties: from pre-established harmonies, monads and *identitas indiscernibilium*. Kant has made philosophy serious and I am keeping it so. That these gentlemen should think differently is easily explained; for has not Leibnitz a central Monad and a *Theodicée* also, with which to deck it out? Now this is quite to the taste of my gentlemen 'of the philosophical trade.' It does not stand in the way of earning a honest livelihood; it allows one to subsist; whereas such a thing as Kant's "Critique of all Speculative Theology," makes one's hair stand on end. Kant is consequently a wrong-headed man and one to be set aside. Vivat Leibnitz! Vivat the 'philosophical trade!' Vivat old woman's philosophy! These gentlemen really imagine that, according to the standard of their own petty aims, they can obscure what is good, disparage what is great, and accredit what is false. They may perhaps succeed in doing so for a time, but certainly not in the long run, nor with impunity. Notwithstanding all their machinations and spiteful ignoring of me for forty years, have not even I at last made my way? During those forty years however I have learnt to appreciate Chamfort's words: "*En examinant la ligue des sots contre les gens d'esprit, on croirait voir une conspiration de valets pour écarter les maîtres.*"

---

[1] For Kant has disclosed the dreadful truth, that philosophy must be quite a different thing from Jewish mythology. [Add to 3rd ed.]

We do not care to have much to do with those whom we dislike. One of the consequences of this antipathy for Kant, therefore, has been an incredible ignorance of his doctrines. I can scarcely believe my eyes at times, when

I see certain proofs of this ignorance, and must here support my assertion by a few examples. First let me present a very singular specimen, though it is now some years old. In Professor Michelet's "Anthropology and Psychology" (p. 444), he states Kant's Categorical Imperative in the following words: "thou must, for thou canst" *(du sollst, denn du kannst)*. This cannot be a *lapsus calami*, for he again states it in the same words in his "History of the Development of Modern German Philosophy" (p. 38),[1] published three years later. Letting alone the fact that he appears to have studied Kantian philosophy in Schiller's epigrams, he has thus turned the thing upside down, and expressed exactly the opposite of Kant's argument; evidently without having the slightest inkling of what Kant meant by that postulate of Freedom on the basis of his Categorical Imperative. None of Professor Michelet's colleagues, to my knowledge, have pointed out this mistake, but "*hanc veniam damus, petimusque vicissim.*"—Another more recent instance. The above mentioned reviewer of Oersted's book (see note 1 (*c*), p. 202), to whose title the present treatise unfortunately had to stand godfather, comes in that work on the sentence that "bodies are spaces filled with force" (*krafterfüllte Räume*). This is new to him; so without the faintest suspicion that he has to do with a far-famed Kantian dogma, and taking this for a paradoxical opinion of Oersted's, he attacks it and argues against it bravely, persistently and repeatedly in both his reviews, which appeared at an interval of three years from one another, using arguments like these: "Force cannot fill Space without something substantial, Matter;" then again three years later: "Force in Space does not yet constitute any thing.

---

[1] Another instance of Michelet's ignorance is to be found in Schopenhauer's posthumous writings, see "Aus Arthur Schopenhauer's handschriftlichem Nachlass," Leipzig, A. Brockhaus, 1864, p. 327. [Editor's note.]

For Force to fill Space, there must be Substance, Matter. A mere force can never fill. Matter must be there for it to fill."—Bravo! my cobbler would use just such arguments as these.[1]—When I see *specimina eruditionis* of this sort, I begin to have my misgivings whether I did not do the man injustice by naming him among those who endeavour to undermine Kant; but in this, to be sure, I had in view his assertions that "Space is but the relation, the juxtaposition of things,"[2] and that "Space is a relation in which things stand, a juxtaposition of things. This juxtaposition ceases to be a conception as soon as the conception of Matter ceases."[3] For he might possibly have penned these sentences in sheer innocence, since he may have known no more of the "Transcendental Aesthetic" than of the "Metaphysical First Principles of Natural Science;" though to be sure, this would be rather extraordinary for a professor of philosophy. Now-a-days however we must not be surprised at anything. For all knowledge of Critical Philosophy has died out, in spite of its being the latest true philosophy that has appeared, and a doctrine withal, that has made a revolution and epoch in human knowledge and thought. Now therefore, since it has overthrown all previous systems, and since the knowledge of it has died out, philosophising no longer proceeds on the basis of any of the doctrines propounded by the great minds of the past, but becomes a mere random untutored process, having an ordinary education and the catechism for its foundation. Now that I have startled them however, our professors may perhaps take to studying Kant's works again. Still Lichtenberg says:

---

[1] The same reviewer (Von Reuchlin-Meldegg) when he expounds the doctrines of the philosophers concerning God in the August number of the Heidelberg Annals (1855), p. 579, says: "In Kant, God is a thing in itself which cannot be known." In his review of Frauenstädt's "Letters" in the Heidelberg Annals of May and June (1855) he says that there is no knowledge *à priori*. [Add. to 3rd ed.]

[2] C. 1. p. 899.

[3] p. 908.

"Past a certain age, I think it as impossible to learn Kantian Philosophy as to learn rope-dancing."

I should certainly not have condescended to record the sins of these sinners had not the interests of truth required that I should do so, in order to show the state of degradation at which German Philosophy has arrived fifty years after Kant's death in consequence of the machinations of the gentlemen 'of the trade,' and also to show what would result, if these puny minds, who know nothing but their own ends, were to be suffered without hindrance to check the influence of the great geniuses who have illumined the world. I cannot look on at this in silence; it is rather a case to which Göthe's exhortation applies:

> "Du Kräftiger, sei nicht so still,
> Wenn auch sich Andre scheuen:
> Wer den Teufel erschrecken will,
> Der muss laut schreien."

Dr. Martin Luther thought so also.

Hatred against Kant, hatred against me, hatred against truth, all however *in majorem Dei gloriam*, is what inspires these worthies who live on philosophy. Who can be so blind as not to see that University philosophy is the enemy of all true, serious philosophy, whose progress it feels bound to withstand? For a philosophy which deserves the name, is pure service of truth, therefore the most sublime of all human endeavours; but, as such, it is not adapted for a trade. Least of all can it have its seat in Universities, where a theological Faculty predominates and things are irrevocably decided beforehand ere philosophy comes to them. With Scholasticism, from which University philosophy descends, it was quite a different thing. Scholasticism was avowedly the *ancilla theologiæ*, so that here the name corresponded to the thing. Our University philosophy of to-day, on the contrary, disclaims the connection, and professes independent research; yet in reality it is only the *ancilla* disguised, and it is intended no less than its predecessor to be the servant of Theology. Thus genuine, sincerely meant philosophy has an adversary under the guise of an ally in University philosophy. Therefore I said long ago, that nothing would be of greater benefit to philosophy than for it to cease altogether to be taught at Universities; and if at that time I still admitted the propriety of a brief, quite succinct course of History of Philosophy accompanying Logic—which undoubtedly ought to be taught at Universities—I have since withdrawn that hasty concession in consequence of the following disclosure made to us in the *Göttingischen Gelehrten Anzeigen* of the 1st January, 1853, p. 8, by the *Ordinarius loci* (one who writes History of Philosophy in thick volumes): "It could not be mistaken that Kant's doctrine is ordinary Theism, and that it has contributed little or nothing towards transforming the current views on God and his relation to the world."—If this is the state of the case, Universities are in my opinion no longer the right place even for teaching History of Philosophy. There designs and intentions reign paramount. I had indeed long ago begun to suspect, that History of Philosophy was taught at our Universities in the same spirit and with the same *granum salis* as Philosophy itself, and it needed but very little to make my suspicions certainty. Accordingly it is my wish to see both Philosophy and its History disappear from the lecture-list, because I desire to rescue them from the tender mercies of our court-councillors.[1] But far be it from me, to wish to see our professors of philosophy removed from their thriving business at our Universities. On the contrary, what I should like would be, to see them promoted three degrees higher in dignity and raised to the highest faculty, as professors of Theology. For at the bottom they have really been this for some time already, and have served quite long enough as volunteers.

---

[1] *Hofräthe.* A title of honour often given for literary and scientific merit in Germany, and common among University professors. [Tr.'s note.]

Meanwhile my honest and kindly advice to the young generation is, not to waste any time with University philosophy, but to study Kant's works and my own instead. I promise them that there they will learn something substantial, that will bring light and order into their brains: so far at least as they may be capable of receiving them. It is not good to crowd round a wretched farthing rushlight when brilliant torches are close by; still less to run after will o' the wisps. Above all, my truth-seeking young friends, beware of letting our professors tell you what is contained in the Critique of Pure Reason. Read it yourselves, and you will find in it something very different from what they deem it advisable for you to know.—In our time a great deal too much study is generally devoted to the History of Philosophy; for this study, being adapted by its very nature to substitute knowledge for reflection, is just now cultivated downright with a view to making philosophy consist in its own history. It is not only of doubtful necessity, but even of questionable profit, to acquire a superficial half-knowledge of the opinions and systems of all the philosophers who have taught for 2,500 years; yet what more does the most honest history of philosophy give? A real knowledge of philosophers can only be acquired from their own works, and not from the distorted image of their doctrines as it is found in the commonplace head.[1] But it is really urgent that order should be brought into our heads by some sort of philosophy, and that we should at the same time learn to look at the world with a really unbiassed eye. Now no philosophy is so near to us, both as regards time and language, as that of Kant, and it is at the same time a philosophy, compared with which all those which went before are superficial. On this account it is unhesitatingly to be preferred to all others.

---

[1] "*Potius de rebus ipsis judicare debemus, quam pro magno habere, de hominibus quid quisque senserit scire,*" says St. Augustine ("*De civ. Dei,*" l. 19, c. 3).—Under the present mode of proceeding, however, the philosophical lecture-room becomes a sort of rag-fair for old worn-out,

But I perceive that the news of Caspar Hauser's escape has already spread among our professors of philosophy; for I see that some of them have already given vent to their feelings in bitter and venomous abuse of me in various periodicals, making up by falsehoods for their deficiency of wit.[1] Nevertheless I do not complain of all this, because I am rejoiced at the cause and amused by the effect of it, as illustrative of Göthe's verse:

"Es will der Spitz aus unserm Stall
Uns immerfort begleiten:
Doch seines Bellens lauter Schall
Beweist nur, dass wir reiten."

ARTHUR SCHOPENHAUER.

FRANKFURT AM MEIN,
August, 1854.

---

cast-off opinions, which are brought there every six months to be aired and beaten. [Add. to 3rd ed.]

[1] I take this opportunity urgently to request that the public will not believe unconditionally any accounts of what I am supposed to have said, even when they are given as quotations; but will first verify the existence of these quotations in my works. In this way many a falsehood will be detected, which can however only be stamped as a direct forgery when accompanied by quotation marks (" "). [Add. to 3rd ed.]

EDITOR'S PREFACE TO THE THIRD EDITION.

SCHOPENHAUER has left an interleaved copy of his work "On the Will in Nature," as well as of his other writings, and has inserted in it those Corrections and Additions which he intended to use for the Third Edition. I have therefore included them in this Third Edition.

The Corrections chiefly concern the style, here and there an expression being changed, and a word inserted or omitted. The Additions, on the contrary, concern the *matter* of the book; they amplify it more or less considerably, and are tolerably numerous.

The Corrections are incorporated by Schopenhauer with the text; whereas the Additions are designated by him as "Notes" (*Anmerkungen*) to be placed at the foot of the pages with the words, "added to the third edition." They will therefore be found at the places indicated by him for them, as foot-notes; and thus the reader will be enabled easily to discern how much has been added in this edition.

As to the value of the present work, Schopenhauer has expressed himself as follows in the "World as Will and Representation:"

"It would be a great mistake to consider the foreign deliverances with which I have connected my own exposition there (in the work "On the Will in Nature") as the real substance and argument of that work which, though small in size, is weighty in import. They are rather a mere occasion which I take as my starting-point in order to expound the fundamental truth of my doctrine more clearly there than has been done anywhere else, and to apply it all the way down even to the empirical knowledge of Nature. This I have done most exhaustively and stringently under the heading "Physical Astronomy," nor can I ever hope to find a more correct or accurate expression for the kernel of my doctrine than the one given there."[1]

I have nothing to add to testimony thus given by Schopenhauer himself.

JULIUS FRAUENSTÄDT.

Berlin, *March*, 1867.

---

[1] "Die Welt a. W. u. V.," vol. ii., c. 18, p. 213.

EDITOR'S PREFACE TO THE FOURTH EDITION.

THE present Fourth Edition is an identical reprint of the Third: it therefore contains the same Corrections and Additions which I had already inserted in the Third Edition from Schopenhauer's own manuscript.

JULIUS FRAUENSTÄDT.

Berlin, *September*, 1877.

THE WILL IN NATURE.

INTRODUCTION.

I BREAK silence after seventeen years,[1] in order to point out to the few who, in advance of the age, may have given their attention to my philosophy, sundry corroborations which have been contributed to it by unbiassed empiricists, unacquainted with my writings, who, in pursuing their own road in search of merely empirical knowledge, discovered at its extreme end what my doctrine has propounded as the Metaphysical (*das Metaphysische*), from which the explanation of experience as a whole must come. This circumstance is the more encouraging, as it confers upon my system a distinction over all hitherto existing ones; for all the other systems, even the latest—that of Kant—still leave a wide gap between their results and experience, and are far from coming down directly to, and into contact with, experience. By this my Metaphysic proves itself to be the only one having an extreme point in common with the physical sciences: a point up to which these sciences come to meet it by their own paths, so as really to connect themselves and to harmonize with it. Moreover this is not brought about by twisting and straining the empirical sciences in order to adapt them to Metaphysic, nor by Metaphysic having been secretly abstracted from them beforehand and then, *à la* Schelling, finding *à priori* what it had learnt *à posteriori*. On the contrary, both meet at the same point of their own accord, yet without collusion. My system therefore, far from soaring above all reality and all experience, descends to the firm ground of actuality, where its lessons are continued by the Physical Sciences.

---

[1] So had I written in 1835, when the present treatise was first composed, having published nothing since 1818, before the close of which year "Die Welt als Wille und Vorstellung" had appeared. For a Latin version, which I had added to the third volume of "*Scriptores ophthalmologici minores*," *edente* J. Radio, in 1830, for the benefit of my foreign readers, of my treatise "On Vision and Colours" (published in 1816), can hardly be said to break the silence of that pause.

Now the extraneous and empirical corroborations I am about to bring forward, all concern the kernel and chief point of my doctrine, its Metaphysic proper. They concern, that is, the paradoxical fundamental truth,

that what Kant opposed as *thing in itself* to mere *phenomenon*—called more decidedly by me *representation*—and what he held to be absolutely unknowable, that this *thing in itself*, this substratum of all phenomena, and therefore of the whole of Nature, is nothing but what we know directly and intimately and find within ourselves as *the will*;[1]

Ding an sich
=
the will

that accordingly, this *will*, far from being inseparable from, and even a mere result of, *knowledge*, differs radically and entirely from, and is quite independent of, knowledge, which is secondary and of later origin; and can consequently subsist and manifest itself without knowledge: a thing which actually takes place throughout the whole of Nature, from the animal kingdom downwards;

that this *will*, being the one and only thing in itself, the sole truly real, primary, metaphysical thing in a world in which everything else is only phenomenon—*i.e.* mere representation—gives all things, whatever they may be, the power to exist and to act;

---

[1] As will be seen by the following detailed exposition, Schopenhauer attaches a far wider meaning to the word than is usually given, and regards the *will*, not merely as *conscious volition* enlightened by Reason and determined by motives, but as the fundamental essence of all that occurs, even where there is no choice. [Tr.]

that accordingly, not only the voluntary actions of animals, but the organic mechanism, nay even the shape and quality of their living body, the vegetation of plants and finally, even in inorganic Nature, crystallization, and in general every primary force which manifests itself in physical and chemical phenomena, not excepting Gravity,—that all this, I say, in itself, *i.e.* independently of phenomenon (which only means, independently of our brain and its representations), is absolutely identical with the *will* we find within us and know as intimately as we can know anything;

that further, the individual manifestations of the will are set in motion by *motives* in beings gifted with an intellect, but no less by *stimuli* in the organic life of animals and of plants, and finally in all inorganic Nature, by *causes* in the narrowest sense of the word —these distinctions applying exclusively to phenomena;

Cause

that, on the other hand, knowledge with its substratum, the intellect, is a merely secondary phenomenon, differing completely from the will, only accompanying its higher degrees of objectification and not essential to it; which, as it depends upon the manifestations of the will in the animal organism, is therefore physical, and not, like the will, metaphysical;

that we are never able therefore to infer absence of will from absence of knowledge; for the will may be pointed out even in all phenomena of unconscious Nature, whether in plants or in inorganic bodies; in short, *that* the will is not conditioned by knowledge, as has hitherto been universally assumed, although knowledge *is* conditioned by the will.

Now this fundamental truth, which even to-day sounds so like a paradox, is the part of my doctrine to which, in all its chief points, the empirical sciences—themselves ever eager to steer clear of all Metaphysic—have contributed just as many confirmations forcibly elicited by the irresistible cogency of truth, but which are most surprising on account of the quarter whence they proceed; and although they have certainly come to light since the publication of my chief work, it has been quite independently of it and as the years went on. Now, that it should be precisely this fundamental doctrine of mine which has thus met with confirmation, is advantageous in two respects. First, because it is the main thought upon which my system is founded; secondly, because it is the only part of my philosophy that admits of confirmation through sciences which are alien to, and independent of, it. For although the last seventeen years, during which I have been constantly occupied with this subject, have, it is true, brought me many corroborations as to other parts, such as Ethics, Æsthetics, Dianoiology; still these, by their very nature, pass at once from the sphere of actuality, whence they arise, to that of philosophy itself: so they cannot claim to be extraneous evidence, nor can they, as collected by me, have the same irrefragable, unequivocal cogency as those concerning *Metaphysics* proper which are given by its correlate *Physics* (in the wide sense of the word which the Ancients gave it). For, in pursuing its own road, Physics, *i.e.*, Natural Science as a whole, must in all its branches finally come to a point where physical explanation ceases. Now this is precisely the *Metaphysical*, which Natural Science only apprehends as the impassable barrier at which it stops short and henceforth abandons its subject to Metaphysics. Kant therefore was quite right in saying: "It is evident, that the primary sources of Nature's agency must absolutely belong to the sphere of Metaphysics."[1] Physical science is wont to designate this unknown, inaccessible something, at which its investigations stop short and which is taken for granted in all its explanations, by such terms as physical force, vital force, formative principle, &c. &c., which in fact mean no more than x, y, z. Now if nevertheless, in single, propitious instances, specially acute and observant investigators succeed in casting as it were a furtive glance behind the curtain which bounds off the domain of Natural Science, and are able not only to feel it is a barrier but, in a sense, to obtain a view of its nature and thus to peep into the metaphysical region beyond; if moreover, having acquired this privilege, they explicitly designate the limit thus explored downright as that which is stated to be the true inner essence and final principle of all things by a system of Metaphysics unknown to them, which takes its reasons from a totally different sphere and, in every other respect, recognises all things merely as phenomena, *i.e.*, as representation—then indeed the two bodies of investigators must feel like two mining engineers driving a gallery, who, having started from two points far apart and worked for some time in subterranean darkness, trusting exclusively to compass and spirit-level, suddenly to their great joy catch the sound of each other's hammers. For now indeed these investigators know, that the point so long vainly sought for has at last been reached at which Metaphysics and Physics meet—they, who were as hard to bring together as Heaven and Earth—that a reconciliation has been initiated and a connection found between these two sciences. But the philosophical system which has witnessed this triumph receives by it the strongest and most satisfactory proof possible of its own truth and accuracy. Compared with such a confirmation as this, which may, in fact, be looked upon as equivalent to proving a sum in arithmetic, the regard or disregard of a given period of time loses all importance, especially when we consider what has been the subject of interest meanwhile and find it to be—the sort of philosophy we have been treated to since Kant. The eyes of the public are gradually opening to the mystification by which it has been duped for the last forty years under the name of philosophy, and this will be more and more the case. The day of reckoning is at hand, when it will see whether all this endless scribbling and quibbling since Kant has brought to light a single truth of any kind. I may thus be dispensed from the obligation of entering here into subjects so unworthy; the more so, as I can accomplish my purpose more briefly and agreeably by narrating the following anecdote. During the carnival, Dante having lost himself in a crowd of masks, the Duke of Medici ordered him to be sought for. Those commissioned to look for him, being doubtful whether they would be able to find him, as he was himself masked, the Duke gave them a question to put to every mask they might meet who resembled Dante. It was this: "Who knows what is good?" After receiving several foolish answers, they finally met with a mask who replied: "He that knows what is bad," by which Dante was immediately recognised. What is meant by this here is, that I have seen no reason to be disheartened on account of the want of sympathy of my contemporaries, since I had at the same time before my eyes the objects of their sympathy. What those authors were, posterity will see by their works; what the contemporaries were, will be seen by the reception they gave to those works. My doctrine lays no claim whatever

---

[1] Kant, "Von der wahren Schätzung der lebendigen Kräfte," § 51.

---

[1] Baltazar Gracian, "*El Criticon,*" iii. 90, to whom I leave the responsibility for the anachronism.

to the name "Philosophy of the present time" which was disputed to the amusing adepts of Hegel's mystification; but it certainly does claim the title of "Philosophy of time to come:" that is, of a time when people will no longer content themselves with a mere jingle of words without meaning, with empty phrases and trivial parallelisms, but will exact real contents and serious disclosures from philosophy, while, on the other hand, they will exempt it from the unjust and preposterous obligation of paraphrasing the national religion for the time being. "For it is an extremely absurd thing," says Kant,[1] "to expect to be enlightened by Reason and yet to prescribe to her beforehand on which side she must incline."—It is indeed sad to live in an age so degenerate, that it should be necessary to appeal to the authority of a great man to attest so obvious a truth. But it is absurd to expect marvels from a philosophy that is chained up, and particularly amusing to watch the solemn gravity with which it sets to work to accomplish great things, when we all know beforehand "the short meaning of the long speech."[2] However the keen-sighted assert that under the cloak of philosophy they can mostly detect theology holding forth for the edification of students thirsting after truth, and instructing them after its own fashion;—and this again reminds us forcibly of a certain favourite scene in Faust. Others, who think that they see still further into the matter, maintain that what is thus disguised is neither theology nor philosophy, but simply a poor devil who, while solemnly protesting that he has lofty, sublime truth for his aim, is in fact only striving to get bread for himself and for his future young family. This he might no doubt obtain by other means with less labour and more dignity; meanwhile however for this price he is ready to do anything he is asked to do, even to deduce *à priori*, nay, should it come to the worst, to perceive, the 'Devil and his dam,' by intellectual intuition—and here indeed the exceedingly comical effect is brought to a climax by the contrast between the sublimity of the ostensible, and the lowliness of the real, aim. It remains nevertheless desirable, that the pure, sacred precincts of philosophy should be cleansed of all such traders, as was the temple of Jerusalem in former times of the buyers and sellers.—Biding such better times therefore, may our philosophical public bestow its attention and interest as it has done hitherto. May it continue as before invariably naming Fichte as an obligato accompaniment to, and in the same breath with, Kant—that great mind, produced but once by Nature, which has illumined its own depth—as if forsooth they were of the same kind; and this without a single voice being heard to exclaim in protest Ἡρακλῆς καὶ πίθηκος! May Hegel's philosophy of absolute nonsense—three-fourths cash and one-fourth crazy fancies—continue to pass for unfathomable wisdom without anyone suggesting as an appropriate motto for his writings Shakespeare's words: "Such stuff as madmen tongue and brain not," or, as an emblematical vignette, the cuttle-fish with its ink-bag, creating a cloud of darkness around it to prevent people from seeing what it is, with the device: *mea caligine tutus*.—May each day bring us, as hitherto, new systems adapted for University purposes, entirely made up of words and phrases and in a learned jargon besides, which allows people to talk whole days without saying anything; and may these delights never be disturbed by the Arabian proverb: "I hear the clappering of the mill, but I see no flour."—For all this is in accordance with the age and must have its course. In all times some such thing occupies the contemporary public more or less noisily; then it dies off so completely, vanishes so entirely, without leaving a trace behind, that the next generation no longer knows what it was. Truth can bide its time, for it has a long life before it. Whatever is genuine and seriously meant, is always slow to make its way and certainly attains its end almost miraculously; for on its first appearance it as a rule meets with a cool, if not ungracious, reception: and this for exactly the same reason that, when once it is fully recognised and has passed on to posterity, the immense majority of men take it on credit, in order to avoid compromising themselves, whereas the number of genuine appreciators remains nearly as small as it was at first. These few nevertheless suffice to make the truth respected, for they are themselves respected. And thus it is passed from hand to hand through centuries over the heads of the inept multitude: so hard is the existence of mankind's best inheritance!—On the other hand, if truth had to crave permission to be true from such as have quite different aims at heart, its cause might indeed be given up for lost; for then it might often be dismissed with the witches' watch-word: "fair is foul, and foul is fair." Luckily however this is not the case. Truth depends upon no one's favour or disfavour, nor does it ask anyone's leave: it stands upon its own feet, and has Time for its ally; its power is irresistible, its life indestructible.

---

[1] Kant, "Krit. d. r. V." 5th edition, p. 755. (English translation by M. Müller, p. 640.)

[2] Schiller, "der langen Rede kurzer Sinn." [Tr.]

PHYSIOLOGY AND PATHOLOGY.

IN classifying the above-mentioned empirical corroborations of my doctrine according to the sciences from which they come, while I take the graduated order of Nature from the highest to the lowest degree as a guiding-thread to my expositions, I must first mention a very striking confirmation lately received by my chief dogma in the physiological and pathological views of Dr. J. D. Brandis, private physician to the King of Denmark, a veteran in science, whose "Essay on Vital Force" (1795) had received Reil's hearty commendation. In his two latest writings: "Experiences in the Application of Cold in Disease" (Berlin, 1833), and "Nosology and Therapeutics of Cachexiæ" (1834), we find him in the most emphatic and striking manner stating the primary source of all vital functions to be an *unconscious will*, from which he derives all processes in the machinery of the organism, in health as well as in disease, and which he represents as the *primum mobile* of life. I must support this by literal quotations from these essays, since few save medical readers are likely to have them at hand.

In the first of them, p. viii., we find: "The essence of every living organism consists in the will to maintain its own existence as much as possible over against the macrocosm;"—p. x.: "Only *one* living entity, *one* will can be in an organ at the same time; therefore if there is a diseased *will* in disagreement with the rest of the body in the organ of the skin, we may hold it in check by applying cold as long as the generation of warmth, a normal *will*, can be induced by it." P. 1: "If we are forced to the conviction that there must be a *determining principle*—a *will*, in every vital action, by which the development suited to the whole organism is occasioned, and each metamorphosis of the parts conditioned, in harmony with the whole individuality, and likewise that there is a something capable of being determined and developed," &c. &c.—P. 11: "With respect to individual life, the element which determines, the organic *will*, if it is to rest satisfied, must be able to attain what it wants from that which has to be determined. This occurs even when the vital movements are over-excited, as in inflammation: something new is formed, the noxious element is expelled; new plastic materials are meanwhile conveyed through the arteries, more venous blood is carried off, until the process of inflammation is finished and the organic *will* satisfied. It is however possible to excite this *will* to such a degree, as to make satisfaction impossible. This exciting cause (or stimulus) either acts directly upon the particular organ (poison, contagion) or it affects the whole life; and this life then begins to make the most strenuous efforts to rid itself of the noxious element or to modify the disposition of the organic *will*, and provokes critical vital activity in particular parts (inflammations) or yields to the unappeased *will*."—P. 12: "The insatiable *will* acts destructively upon the organism unless either (*a*) the whole life, in its efforts to attain unity (tendency to adapt means to end), produces other activities requiring satisfaction (*crises et lyses*) which hold that *will* in check—called decisive (*crises completæ*) when quite successful; *crises incompletæ*, when only partially so—or (*b*) some other stimulus (medicine) produces another *will* which represses the diseased one. If we place this in one and the same category with the *will* of which we have become conscious through our own representations, and bear in mind that here there can be no question of more or less distant resemblance, we gain the conviction that we have grasped the fundamental conception of the *one* unlimited, therefore indivisible, life which, according to its different manifestations in various more or less endowed and exercised organs, is just as able to make hair grow on the human body as to combine the most sublime representations. We see that the most violent passion—unsatisfied *will*—may be checked by more or less strong excitement," &c. &c.—P. 18: "The determining element—*this organic will without representation*, this tendency to preserve the organism as a unity—is induced by outward temperature to modify its activity now in the same, now in a remoter organ. Every manifestation of life, however, whether in health or in disease, is a manifestation of the *organic will: this will determines vegetation:* in a healthy condition, in harmony with the unity of the whole; in an unhealthy one . . . . it is induced *not to will* in harmony with that unity" . . . .—P. 23: "Cold suddenly applied to the skin suppresses its function (chill); cold drinks check the *organic will* in the digestive organs and thereby intensify that of the skin and produce perspiration; just so with the diseased *organic will:* cold checks cutaneous eruptions," &c. &c.—P. 33: "Fever is the complete participation of the whole vital process in a diseased *will, i.e.* it is to the entire vital process what inflammation is to particular organs—the effort of our vitality to form something definite, in order to content the diseased *will* and remove the noxious element.—We call this process of formation *crisis* or *lysis* (turning-point or release). The first perception of the pernicious element which causes the diseased *will,* affects the individuality just in the same way as a noxious element apprehended by our senses, before we have brought to clear representation the entire relation in which it stands to our individuality and the means of removing it. It creates terror and its consequences, a standstill of the vital process in the *parenchyma*, especially in the parts directed towards the outer world; in the skin, and in all the motor muscles belonging to the entire individuality (outer body): shuddering, chills, trembling, pains in the limbs, &c. &c. The difference between them is, that in the latter case the noxious element, either at once or gradually, becomes clear representation, because it is compared with the individuality by means of all the senses, so that its relation to that individuality can be determined, and the means of protection against it (disregard, flight, warding off, defence, &c.) be brought to a *conscious will;* whereas, in the former case, we remain unconscious of that noxious element, and it is life alone (or Nature's curative power) which is striving to remove the noxious element and thereby to content the diseased *will.* Nor must this be taken for a simile; it is, on the contrary, a true description of the manifestation of life."—P. 58: "We must however always bear in mind, that cold acts here as a powerful stimulus to check or moderate the diseased *will* and to rouse in its place a natural *will*, accompanied by general warmth."—

In almost every page of this book similar expressions are to be found. In the second of the Essays I have named, Brandis no longer combines the explanation by the will so universally with each separate analysis, probably in consideration that this explanation is properly speaking, a metaphysical one. Nevertheless he maintains it entirely and completely, giving it even all the more distinct and decided expression, wherever he states it. Thus, for instance, in § 68 *et seq.* he speaks of an "*unconscious will*, which cannot be separated from the conscious one," and is the *primum mobile* of all life, as well in plants as in animals; for, in these, it is a desire and aversion manifesting itself in all the organs which determines all their vital processes, secretions, &c. &c.—§. 71: "All convulsions prove that the manifestation of the will can take place without distinct power of representation."—§. 72: "Everywhere do we meet with a spontaneous, uncommunicated activity, now determined by the sublimest human free will, now by animal desire and aversion, now again by simple, more vegetative requirements; which activity, in order to maintain itself, calls forth several other kinds of activity in the unity of the individual."—P. 96: "A creative, spontaneous, uncommunicated activity shows itself in every vital manifestation." . .—"The third factor in this individual creation is the *will, the individual's life itself.*" . .—"The nerves are the conductors of this individual creation: by their means form and mixture are varied according to desire and aversion."—P. 97: "Assimilation of foreign substance . . . makes the blood . . . It is not an absorption or an exudation of organic matter; . . . on the contrary, here the sole factor of the phenomenon is in all cases *the creative will,* a life which cannot be brought back to any sort of imparted movement.—

When I wrote this (1835) I was still *naïf* enough seriously to believe that Brandis was unacquainted with my work, or I should not allude here to his writings; for they would then be merely a repetition, application and carrying out of my own doctrine on this point, not a corroboration of it. But I thought I might safely assume that he did not know me, because he has not mentioned me anywhere and because if he had known me, literary honesty would have made it his imperative duty not to remain silent concerning the man from whom he had borrowed his chief fundamental thought, the more so as he saw that man then enduring unmerited neglect, by his writings being generally ignored—a circumstance which might be construed as favourable to fraud. Add to this, that it lay in Brandis' own interest as a writer, and would therefore have shown sagacity on his part, to have appealed to me as an authority. For the fundamental doctrine propounded by him is so striking and paradoxical, that even his Göttingen reviewer is amazed and hardly knows what to think of it; yet such a doctrine as this was left without foundation either through proof or induction, nor did Dr. Brandis establish its relation to the whole of our knowledge of Nature: he simply asserted it. I imagined therefore that it was by the peculiar gift of divination, which enables eminent physicians to see and do the right thing in cases of illness, that he had been led to this view, without being able to give a strict and methodical account of the grounds of this really metaphysical truth, although he must have seen how greatly it is opposed to the generally received views. Had he, thought I, been acquainted with my philosophy, which gives far greater extension to this truth, makes it valid for the whole of Nature and founds it both by proof and induction in close connection with Kant's teaching, from which it proceeds as a final result of excogitation—how gladly must he have availed himself of such confirmation and support, rather than to stand alone by an unheard-of assertion which was never further carried out and, with him, never went beyond bare assertion. Such were the reasons that led me to believe myself entitled to take for granted Dr. Brandis' ignorance of my book.

Since then however I have become better acquainted with German scientists and Copenhagen Academicians, to which body Dr. Brandis belonged, and have gained the conviction that he knew me very well indeed. I stated my reasons for arriving at this conviction already in 1844 in the 2nd vol. of "Die Welt als Wille und Vorstellung,"[1] so that, as the subject is by no means edifying, it is needless to repeat them here; I will merely add that I have since been assured on trustworthy authority that Dr. Brandis not only knew my work but even possessed it, as it was found among his property after his death.—The unmerited obscurity to which writers like myself are long condemned, encourages such people to appropriate their thoughts without so much as naming them.

---

[1] Chapter 20, p. 263; p. 295 of the 3rd edition.

Another medical authority has carried this even farther; for, not content with the thought alone, he has appropriated to himself the expression of it also. I allude to Professor Anton Rosas of the University of Vienna, whose entire § 507 in the 1st vol. of his Textbook of Ophthalmology[2] (1830) is copied word for word from pp. 14-16 of my treatise "On Vision and Colours" (1816) without any mention whatever of me, or even the slightest hint that he is using the words of another. This sufficiently accounts for the care he has taken not to mention my treatise among the lists of twenty-one writings on Colours and forty on the Physiology of the Eye, which he gives in §§ 542 and 567; a caution which was however all the more advisable, as he had appropriated to himself a good deal more out of that pamphlet without mentioning me. All that is referred, for instance, in § 526 to 'them' (*man*), is only applicable to me. His entire § 527 is copied almost literally from my pp. 59 and 60. The theory which he introduces without further ceremony in § 535 by the word "evidently": that is, that yellow is $\frac{3}{4}$ and violet $\frac{1}{4}$ of the eye's activity, never was 'evident' to anyone until I made it so; even to this day it is a truth known to few and acknowledged by fewer still, and much is yet wanting—for example, that I should be dead and buried—ere it be possible to call it 'evident' without further ceremony. The matter will even have to wait till after my death to be seriously sifted, since a close investigation might easily bring to 'evidence' the real difference

[1] Rosas, "Handbuch der Augenheilkunde" (1830).

between Newton's theory of colours and my own, which is simply that his is false, and mine true: a discovery which could not fail to mortify my contemporaries. Wherefore, according to ancient custom, all serious examination into the question is wisely postponed for these few years. Professor Rosas knew no such policy as this and, as the matter was not alluded to anywhere, thought himself entitled, like the Danish Academician, to claim it as lawful prey (*de bonne prise*). Evidently North and South German honesty had not yet come to a satisfactory understanding.—Moreover the whole contents of §§ 538, 539 and 540 in Professor Rosas' book are taken from my pamphlet, nay even in great part copied word for word from my § 13. Still once, where he stands in need of a voucher for a fact, he finds himself obliged to refer to my treatise: that is, in his § 531; and it is most amusing to see the way in which he even brings in the numerical fractions used by me, as a result of my theory, to express all colours. It had probably occurred to him, that appropriating them quite *sans façon* might be a delicate matter, so he says, p. 308: "*If we wished* to express in numbers the first-mentioned relation in which colours stand to white, assuming white to be = 1, the following scale of proportion might *by the way* be adopted (as has already been done by Schopenhauer):

yellow = $\frac{3}{4}$
orange = $\frac{2}{3}$
red = $\frac{1}{2}$
green = $\frac{1}{2}$
blue = $\frac{1}{3}$
violet = $\frac{1}{4}$
black = 0

Now I should like to know how anyone could do this *by the way*, without having first thought out my whole colour-theory, to which alone these numbers refer, and apart from which they are mere abstract numbers without meaning; above all, how anyone could do it who, like Professor Rosas, professes to be a follower of Newton's colour-theory, with which these numbers are in direct contradiction? Finally, I should like to know how it came, that during the thousands of years in which men have thought and written, no one but myself and Professor Rosas should ever have thought of using just these particular fractions to denote colours? For the words I have quoted above tell us, that he would have stated those fractions precisely as he has done, even had I not chanced to do it 'already' fourteen years before and thus needlessly anticipated his statement; they also tell us, that all that is required is '*to wish*,' in order to do so. Now it is precisely in these numerical fractions that the secret of colours lies: by them alone can we rightly solve the mystery of their nature and of their difference from one another.—I should however be heartily glad, were plagiarism the worst kind of dishonesty that defiled German literature; there are others far more mischievous, which penetrate more deeply, and to which plagiarism bears the same proportion as picking pockets in a mild way to capital crime. I allude to that mean, despicable spirit, whose loadstar is personal interest, when it ought to be truth, and in which the voice of intention makes itself heard beneath the mask of insight. Double-dealing and time-serving are the order of the day. 'Tartuffe comedies are performed without *rouge;* nay, Capuchin sermons are preached in halls consecrated to Science; enlightenment, that once revered word, has become a term of opprobrium; the greatest thinkers of the past century, Voltaire, Rousseau, Locke, Hume, are slandered—those heroes, ornaments and benefactors of mankind, whose fame, diffused throughout both hemispheres, can only be increased, if by anything, by the fact that wherever and whenever obscurantists show themselves, it is as their bitterest enemies—and with good reason. Literary *coteries* and associations are formed to deal out praise and blame, and spurious merit is then trumpeted forth and extolled, while sterling merit is slandered or, as Göthe says, "*secreted, by means of an inviolable silence, in which sort of inquisitorial censure the Germans have attained great proficiency.*"[1] The motives and considerations however from which all this proceeds, are of too low a nature for me to care to enumerate them in detail. But what a difference there is between periodicals such as the "Edinburgh Review," in which gentlemen of independent means are induced to write by a genuine interest in the subjects treated, and which honourably upholds its noble motto taken from Publius Syrus: *Judex damnatur cum nocens absolvitur*, and our mean-spirited, disingenuous, German literary journals, full of considerations and intentions, that are mostly compiled for the sake of pay by hired editors, and ought properly to have for their motto: *Accedas socius laudes, lauderis, ut absens.* Now, after twenty years, do I understand what Göthe said to me at Berka in 1814. As I found him reading Madame de Staël's "*De l'Allemagne,*" I remarked in course of conversation that she had given too exaggerated a description of German honesty and one that might mislead foreigners. He laughed and said: "Yes, to be sure, they will not secure their baggage behind and will have it cut off." He then added in a graver tone: "But one has to know German literature in order to realise the full extent of German dishonesty."—All well and good! But the most revolting kind of dishonesty in German literature is that of the time-servers, who pass themselves off for philosophers, while in reality they are obscurantists. The word 'time-serving' no more needs explanation than the thing needs a proof; for anyone who had the face to deny it would furnish strong evidence in support of my present argument. Kant taught, that man ought to use his fellow-man only as an end, never as a means: he did not think it necessary to say, that philosophy ought only to be dealt with as an end, never as a means. Time-serving may after all be excused under every garb, the cowl as well as the ermine, save only the philosopher's cloak (*Tribonion*); for he who has once assumed this, has sworn allegiance to truth, and from that moment every other consideration, no matter of what kind, becomes base treachery. Therefore it was that Socrates did not shun the hemlock, nor Bruno the stake, while 'for a piece of bread these men will transgress.' Are they too short-sighted to see posterity close at hand, with the history of philosophy at its side, recording two lines of bitter condemnation with unflinching hand and iron pen in its immortal pages? Or has this no sting for them?—Well to be sure, if it comes to the worst, '*après moi le déluge*' may be pronounced; but as to '*après moi le mépris*,' that is a more difficult matter. Therefore I fancy they will answer that austere judge as follows: "Ah, dear posterity and history of philosophy! you are quite wrong to take us in earnest; we are not philosophers at all, Heaven forbid! No, we are only professors of philosophy, mere servants of the state, mere philosophers in jest. You might as well drag puppet-knights in pasteboard armour into a real tournament." Then the judge will most likely see how matters stand, erase all their names, and confer upon them the *beneficium perpetui silentii*.

---

[1] Göthe, "Tag-und Jahreshefte," 1812.

[2] This I wrote in 1836. The "Edinburgh Review" has since however greatly deteriorated, and is no longer its old self. I have even seen clerical time-serving in its pages, written down to the level of the mob.

From this digression—to which I had been led away eighteen years ago, by the cant and time-serving I then witnessed, though they were not nearly as flourishing then as they are now—I return to that part of my doctrine which Dr. Brandis has confirmed, though he did not originate it, in order to add a few explanations with which I shall then connect some further corroborations it has since received from Physiology.

The three assumptions which are criticised by Kant in his Transcendental Dialectic under the names of Ideas of Reason, and have in consequence since been set aside in theoretical philosophy, had always stood in the way of a deeper insight into Nature, until that great thinker brought about a complete transformation in philosophy. That supposed Idea of Reason, the soul: that metaphysical being, in whose absolute singleness knowing and willing were knit and blended together to eternal, inseparable unity, was an impediment of this sort for the subject-matter of this chapter. As long as it lasted, no philosophical Physiology was possible: the less so, as its correlate, real, purely passive Matter, had necessarily also to be assumed together with it, as the substance of the body.[1] It was this Idea of Reason, the soul, therefore, that caused the celebrated chemist and physiologist, George Ernest Stahl, at the beginning of the last century to miss the discovery of the truth he so nearly approached and would have quite reached, had he been able to put that which is alone metaphysical, the bare *will*—as yet without intellect—in the place of the *anima rationalis*. Under the influence of this Idea of Reason however, he could not teach anything but that it is this simple, rational soul which builds itself a body, all whose inner organic functions it directs and performs, yet has no knowledge or consciousness of all this, although knowledge is the fundamental destination and, as it were, the substance, of its being. There was something absurd in this doctrine which made it utterly untenable. It was superseded by Haller's Irritability and Sensibility, which, to be sure, are taken in a purely empircial sense, but, to make up for this, are also two *qualitates occultæ*, at which all explanation ceases. The movement of the heart and of the intestines was now attributed to Irritability. But the *anima rationalis* still remained in undiminished honour and dignity as a visitor at the house of the body.[1]—"Truth lies at the bottom of a well," said Democritus; and the centuries with a sigh, have repeated his words. But small wonder, if it gets a rap on the knuckles as soon as it tries to come out!

---

[1] As a being existing by itself, a thing in itself. [Add. to 3rd ed.]

The fundamental truth of my doctrine, which places that doctrine in opposition with all others that have ever existed, is the complete separation between the will and the intellect, which all philosophers before me had looked upon as inseparable; or rather, I ought to say that they had regarded the will as conditioned by, nay, mostly even as a mere function of, the intellect, assumed by them to be the fundamental substance of our spiritual being. But this separation, this analysis into two heterogeneous elements, of the *ego* or *soul*, which had so long been deemed an indivisible unity, is, for philosophy, what the analysis of water has been for chemistry, though it may take time to be acknowledged. With me, that which is eternal and indestructible in man, therefore, that which constitutes his vital principle, is not *the soul*, but—if I may use a chemical term—its radical: and this is *the will*. The so-called soul is already a compound: it is the union of the will and the intellect (*νούς*). This intellect is the secondary element, the *posterius* of the organism and, as a mere cerebral function, is conditioned by the organism; whereas the will is what is primary, the *prius* of the organism, which is conditioned by it. For the will is that thing in itself, which only becomes apparent as an organic body in our representation (that mere function of the brain): it is only through the forms of knowledge (or cerebral function), that is, only in our representation—not apart from that representation, not immediately in our self-consciousness—that our body is given to each of us as a thing which has extension, limbs and organs. As the actions of our body are only acts of volition portraying themselves in representation, so likewise is their substratum, the shape of that body, in the main the portrait of the will: so that, in all the organic functions of our body, the will is just as much the *agent* as in its external actions. True Physiology, at its highest, shows the spiritual (the intellectual) in man to be the product of the physical in him, and no one has done this so thoroughly as Cabanis; but true Metaphysic teaches us, that the physical in man is itself mere product, or rather phenomenon, of a spiritual (the will); nay, that Matter itself is conditioned by representation, in which alone it exists. Perception and reflection will more and more find their explanation through the organism; but not the will, by which conversely the organism is explained, as I shall show in the following chapter. First of all therefore I place *the will, as thing in itself* and quite primary; secondly, its mere visibility, its objectification: *i.e.* the *body;* thirdly, the *intellect*, as a mere function of one part of that body. This part is itself the objectified will to know (the will to know having entered into representation), since the will needs knowledge to attain its own ends. Now the entire world as representation, together with the body itself therefore, inasmuch as it is a perceptible object, nay, Matter in general as existing only in representation,—all this, I say, is again conditioned by that function; for, duly considered, we cannot possibly conceive an objective world without a Subject, in whose consciousness it is present. Thus knowledge and matter (Subject and Object) exist only relatively one for the other and constitute *phenomenon*. The whole thing therefore, owing to the radical change made by me, stands in a different light from that in which it has hitherto been regarded.

---

[1] In which it is lodged in the garret. [Add. to 3rd ed.]

As soon as it is directed outwardly and acts upon a recognised object, as soon therefore as it has passed through the medium of knowledge, we all recognise the *will* at once to be the active principle, and call it by its right name. Yet it is no less active in those inner processes which have preceded such outward actions as their conditions: in those, for instance, which create and maintain organic life and its substratum; and the circulation of the blood, secretion, digestion, &c. &c., are its work likewise. But just because the will was only recognised as the active principle in those cases in which it abandons the individual whence it proceeds, in order to direct itself towards the outer world—now presenting itself precisely for this end, as perception—knowledge has been taken for its essential condition, its sole element, nay, as the substance of which it consists: and hereby was perpetrated the greatest ὕστερον πρότερον that has ever been.

But before all things we must learn to distinguish will [*Wille*] (*voluntas*) from free-will [*Willkühr*] (*arbitrium*)[1] and to understand that the former can subsist without the latter; this however presupposes my whole philosophy. The will is called free-will when it is illumined by knowledge, therefore when the causes which move it are motives: that is, representations. Objectively speaking this means: when the influence from outside which causes the act, has a *brain* for its mediator. A motive may be defined as an external stimulus, whose action first of all causes an *image* to arise in the *brain*, through the medium of which the will carries out the effect proper—an outward action of the body. Now, in the human species however, the place of such an image as this may be taken by a conception drawn from former images of this kind by dropping their differences, which conception consequently is no longer perceptible, but merely denoted and fixed by words. As the action of motives accordingly does not depend upon contact, they can try their power on the will against each other: in other words, they permit a certain choice which, in animals, is limited to the narrow sphere of that which has *perceptible* existence for them; whereas, in man, its range comprises the vast extent of all that is *thinkable*: that is, of his conceptions. Accordingly we designate as *voluntary* those movements which are occasioned, not by *causes* in the narrowest sense of the word, as in inorganic bodies, nor even by *mere stimuli*, as in plants, but by *motives*.[1] These motives however presuppose an *intellect* as *their mediator*, through which causality here acts, without prejudice to its entire necessity in all other respects. Physiologically, the difference between stimulus and motive admits also of the following definition. The stimulus provokes *immediate* reaction, which proceeds from the very part on which the stimulus has acted; whereas the motive is a stimulus that has to go a roundabout way through the brain, where its action first causes an image to arise, which then, but not till then, provokes the consequent reaction, which is now called an act of volition, and *voluntary*. The distinction between voluntary and involuntary movement does not therefore concern what is essential and primary—

---

[1] By this Schopenhauer means the distinction between *the will* in its widest sense, regarded as the fundamental essence of all that happens,—even where there is no choice, even where it is *unconscious*,—and *conscious will*, implying deliberation and choice, commonly called *free-will*. We must however carefully guard against confounding this *relative* free-will, with *absolute* free-will (*liberum arbitrium indifferentiæ*), which Schopenhauer declares to be inadmissible. The sense in which I have used the expression '*free-will*' throughout this treatise, is that of *relative* freedom, *i.e.* power to choose between different motives, free of all outward restraint (*Willkühr*). (Tr.)

---

[1] I have shown the difference between *cause* in its narrowest sense, *stimulus*, and *motive*, at length in my "Grund-probleme der Ethik" p. 29 *et seq.*

for this is in both cases the will—but only what is secondary, the rousing of the will's manifestation: it has to do with the determination whether *causes* proper, *stimuli* or *motives* (*i.e.* causes having passed through the medium of knowledge) are the guidance under which that manifestation takes place. It is in human consciousness,—differing from that of animals by not only containing perceptible representations but also abstract conceptions independent of time-distinctions, which act simultaneously and collaterally, whereby deliberation, *i.e.* a conflict of motives, becomes possible—it is in human consciousness, I say, that free-will (*arbitrium*) in its narrowest sense first makes its appearance; and this I have called elective decision. It nevertheless merely consists in the *strongest* motive for a given individual character overcoming the others and thus determining the act, just as an impact is overcome by a stronger counter-impact, the result thus ensuing with precisely the same necessity as the movement of a stone that has been struck. That all great thinkers in all ages were decided and at one on this point, is just as certain, as that the multitude will never understand, never grasp, the important truth, that the work of our freedom must not be sought in our individual actions but in our very existence and nature itself. In my prize-essay on Freedom of the Will, I have shown this as clearly as possible. The *liberum arbitrium indifferentiæ* which is assumed to be the distinctive characteristic of movements proceeding from *the will*, is accordingly quite inadmissible: for it asserts that effects are possible without causes.

As soon therefore as we have got so far as to distinguish *will* [*Wille*] from *free-will* [*Willkühr*], and to consider the latter as a particular kind or particular phenomenon of the former, we shall find no difficulty in recognising the will, even in unconscious processes. Thus the assertion, that all bodily movements, even those which are purely vegetative and organic, proceed from *the will*, by no means implies that they are voluntary. For that would mean that they were occasioned by motives; but motives are representations, and their seat is the brain: only those parts of our body which communicate with the brain by means of the nerves, can be put in movement by the brain, consequently by motives, and this movement alone is what is called voluntary. The movement of the inner economy of the organism, on the contrary, is directed, as in plant-life, by *stimuli;* only as, on the one hand, the complex nature of the animal organism necessitated an outer sensorium for the apprehension of the outer world and the will's reaction on that outer world, so, on the other hand, did it necessitate a *cerebrum abdominale*, the sympathetic nervous system, in order to direct the will's reaction upon inner stimuli likewise. We may compare the former to a Home Ministry, the latter to a Foreign Office; but the will remains the omnipresent Autocrat.

The progress made in Physiology since Haller has placed beyond doubt, that not only those actions which are consciously performed (*functiones animales*), but even vital processes that take place quite unconsciously (*functiones vitales et naturales*), are directed throughout by the *nervous system*. Likewise that their only difference, as far as our consciousness of them is concerned, consists in the former being directed by nerves proceeding from the brain, the latter by nerves that do not directly communicate with that chief centre of the nervous system—mainly directed towards the outside—but with subordinate, minor centres, with the nerve-knots, the ganglia and their net-work, which preside as it were like vicegerents over the various departments of the nervous system, directing those internal processes that follow upon internal stimuli, just as the brain directs the external actions that follow upon external motives, and thus receiving impressions from inside upon which they react correspondingly, just as the brain receives representations on the strength of which it forms resolutions; only each of these minor centres is confined to a narrower sphere of action. Upon this rests the *vita propria* of each system, in referring to which Van Helmont said that each organ has, as it were, its own *ego*. It accounts also for life continuing in parts which have been cut off the bodies of insects, reptiles, and other inferior animals, whose brain has no marked preponderance over the ganglia of single parts; and it likewise explains how many reptiles are able to live for weeks, nay even months, after their brain has been removed. Now, if our surest experience teaches us that *the will*, which is known to us in most immediate consciousness and in a totally different way from the outer world, is the real agent in actions attended by consciousness and directed by the chief centre of the nervous system; how can we help admitting that those other actions which, proceeding from that nervous system but obeying the direction of its subordinate centres, keep the vital processes constantly going, must also be manifestations of *the will?* Especially as we know perfectly well the cause because of which they are not, like the others, attended by consciousness: we know, that is to say, that all consciousness resides in the brain and therefore is limited to such parts as have nerves which communicate directly with the brain; and we know also that, even in these, consciousness ceases when those nerves are severed. By this the difference between all that is conscious and unconscious and together with it the difference between all that is voluntary and involuntary in the movements of the body is perfectly explained, and no reason remains for assuming two entirely different primary sources of movement: especially as *principia præter necessitatem non sunt multiplicanda*. All this is so obvious, that, on impartial reflection from this standpoint, it seems almost absurd to persist in making the body serve two masters by deriving its actions from two radically different origins and then ascribing on the one hand the movements of our arms and legs, of our eyes, lips, throat, tongue and lungs, of the facial and abdominal muscles, to the will; while on the other hand the action of the heart, the movements of the veins, the peristaltic movements of the intestines, the absorption by the intestinal villi and glands and all those movements which accompany secretion, are supposed to proceed from a totally different, ever mysterious principle of which we have no knowledge, and which is designated by names such as vitality, archeus, *spiritus animales*, vital energy, instinct, all of which mean no more than x.[1]

but
"wil
is
mo
expla
for

It is curious and instructive to see the trouble that excellent writer, Treviranus[2] takes, to find out in the lower animals, such as *infusoria* and *zoophyta*, which movements are voluntary, and which are what he calls automatic or physical, *i.e.* merely vital. He founds his inquiry upon the assumption that he has to do with two primarily different sources of movement; whereas in truth they all proceed from the will, and the whole difference consists in their being occasioned by stimuli or by motives, *i.e.* in their having a brain for their medium or not; and the stimulus may again be merely interior or exterior. In several animals of a higher order—crustaceans and even fishes—he finds that the voluntary and vital movements, for instance locomotion and respiration, entirely coincide: a clear proof that their origin and essence are identical. He says p. 188: In the family of the *actinia*, starfishes, sea-urchins, and *holothuriæ* (*echinodermata pedata Cuv.*), it is evident that the movement of the fluids depends upon the will of the animals and that it is a means of locomotion." Then again p. 288: "The gullet of mammals has at its upper end the pharynx, which expands and contracts by means of muscles resembling voluntary muscles in their formation, yet which do not obey the will." Here we see how the limits of the movements proceeding from the will and of those assumed to be foreign to it, merge into one another. *Ibid.*, p. 293: "Thus movements having all the appearance of being voluntary, take place in the stomachs of ruminants. They do not however always stand in connection with the ruminating process only. Even the simpler human stomach and that of many animals only allows free passage to what is digestible through its lower orifice, and rejects what is indigestible by vomiting."

---

[1] It is especially in secretive processes that we cannot avoid recognising a certain selection of the materials fitted for each purpose, consequently a *free will* in the secretive organs, which must even be assisted by a certain dull sensation, and in virtue of which each secreting organ only extracts from the same blood that particular secretion which suits it and no others: for instance, the liver only absorbs bile from the blood flowing through it, sending the rest of the blood on, and likewise the salivary glands and the pancreas only secrete saliva, the kidneys only urine, &c. &c. We may therefore compare the organs of secretion to different kinds of cattle grazing on one and the same pasture-land, each of which only browses upon the one sort of herb which suits its own particular appetite. [Add. to 3rd ed.]

[2] Treviranus, "Die Erscheinungen und Gesetze des Organischen Lebens," vol. i. pp. 178-185.

There is moreover special evidence that the movements induced by stimuli (involuntary movements) proceed from the will just as well as those occasioned by motives (voluntary movements): for instance, when the same movement follows now upon a stimulus, now again upon a motive, as is the case when the pupil of the eye is contracted. This movement, when caused by increased light, follows upon a stimulus; whereas, when occasioned by the wish to examine a very small object minutely in close proximity, it follows upon a motive; because contracting the pupil enables us to see things distinctly even when quite near to us, and this distinctness may be increased by our looking through a hole pierced in a card with a pin; conversely, the pupil is dilated when we look at distant objects. Surely the same movement of the same organ is not likely to proceed alternately from two fundamentally different sources.—E. H. Weber[1] relates that he discovered in himself the power of dilating and contracting at will the pupil of one of his eyes, while looking at the same object, so as to make that object appear now distinct, now indistinct, while the other eye remained closed.—Joh. Müller[2] also tries to prove that the will acts upon the pupil.

but
will
Free-
[illegible]

The truth that the innermost mainspring of unconsciously performed vital and vegetative functions is the will, we find moreover confirmed by the consideration, that even the movement of a limb recognised as voluntary, is only the ultimate result of a multitude of preceding changes which have taken place inside that limb and which no more enter into our consciousness than those organic functions. Yet these changes are evidently that which was first set in motion by the will, the movement of the limb being merely their remote consequence; nevertheless this remains so foreign to our consciousness that physiologists try to reach it by means of such hypotheses as these: that the sinews and muscular fibre are contracted by a change in the cellular tissue wrought by a precipitation of the blood-vapour in that tissue to serum; but that this change is brought about by the nerve's action, and this—by *the will*. Thus, even here, it is not the change which proceeded originally from the will which comes into consciousness, but only its remote result; and even this, properly speaking, only through the special perception of the brain in which it presents itself together with the whole organism. Now by following the path of experimental research and hypotheses physiologists would never have arrived at the truth, that the last link in this ascending causal series is *the will;* it is known to them, on the contrary, in quite a different way. The solution of the enigma comes to them in a whisper from outside the investigation, owing to the fortunate circumstance that the investigator is in this case at the same time himself the object of the investigation and by this learns the secret of the inward process, his explanation of which would otherwise, like that of every other phenomenon, be brought to a standstill by an inscrutable force. And conversely, if we stood in the same inward relation towards every natural phenomenon as towards our own organism, the explanation of every natural phenomenon, as well as of all the properties of every body, would likewise ultimately be reduced to a will manifesting itself in them. For the difference does not reside in the thing itself, but in our relation to the thing. Wherever explanation of the physical comes to an end, it is met by the metaphysical; and wherever this last is accessible to immediate knowledge, the result will be, as here, the will. That even those parts of the body whose movements do not proceed from the brain, do not follow upon motives, and are not voluntary, are nevertheless ruled and animated by the will, is also shown by their participation in all unusually violent movements of the will, *i.e.* emotions and passions. We see, for instance, the quickened pulse in joy or alarm, the blush in embarassment, the cheek's pallor in terror or in suppressed anger, the tears of sorrow, the difficult breathing and increased activity of the intestines in terror, watering of the mouth at the sight of dainties, nausea occasioned by that of loathsome objects, strongly accelerated circulation of the blood and even altered quality of bile through wrath, and of saliva through violent rage: this last even to the degree, that an excessively irritated dog may communicate hydrophobia by its bite without being itself affected with rabies, or even then contracting the disease—and the same is also asserted of cats and of cocks. The organism is further deeply undermined by lasting grief, and may be mortally affected by fright as well as by sudden joy. On the other hand, all those inner processes and changes which only have to do with the intellect and do not concern the will, however great may be their importance, remain without influence upon the machinery of the organism, with the one exception, that mental activity, prolonged to excess, fatigues and gradually exhausts the brain and finally undermines the organism. This again confirms the fact that the intellect is of a secondary character, and merely the organic function of a single part, a product of life; not the innermost kernel of our being, not the thing in itself, not metaphysical, incorporeal, eternal, like the will: the will never tires, never grows old, never learns, never improves by practice, is in infancy what it is in old age, eternally one and the same, and its character in each individual is unchangeable. Being essential moreover, it is likewise immutable, and therefore exists in animals as it does in us; for it does not, like the intellect, depend upon the perfection of the organisation, but is in every essential respect in all animals the same thing which we know so intimately. Accordingly animals have all the feelings which belong to man: joy, grief, fear, anger, love, hate, desire, envy, &c. &c. The great difference between man and the brute creation consists exclusively in the degrees of perfection of the intellect. This however is leading us too far from our subject, so I refer my readers to my chief work, vol. ii. chap. 19, *sub.* 2.

---

[1] E. H. Weber, "Additamenta ad E. H. Weberi tractatum de motu iridis." Lipsia, 1823.

[2] Joh. Müller, "Handbuch der Physiologie," p. 764.

After the cogent reasons just given in favour of the primary *agens* in the inward machinery of the organism being the very same will which rules the outward actions of the body and only reveals itself as the will in this passage through consciousness because here it needs the mediation of outwardly directed knowledge, we shall not be astonished to find that other physiologists besides Brandis had, by means of strictly empirical research, also recognised this truth more or less clearly. Meckel,[1] in his "Archiv für die Physiologie," arrives quite empirically and impartially at the conclusion, that vegetative existence [in animals], the first growth of the embryo, the assimilation of nourishment and plant-life, ought properly to be considered as manifestations of the will, nay, that even the inclination of the magnetic needle seems to be something of the same kind. "The assumption," he says, "of a certain free will in every vital movement may perhaps be justified." "Plants appear to seek light voluntarily," &c. &c. This book is dated 1819 just after the appearance of my work; and as, to say the least, it is doubtful whether it had any influence upon him or whether he was even aware of its existence, I class these utterances among the independent empirical confirmations of my doctrine. Burdach also,[2] in his great work on Physiology, arrives by a completely empirical road at the conclusion, that "self-love is a force belonging to all things indiscriminately." He points it out, first in animals, then in plants, and lastly in inanimate bodies. But what is self-love after all, if not the will to preserve our existence, the will to live? Under the heading "Comparative Anatomy," I shall quote a passage from the same book, which confirms my view still more decidedly. That the doctrine, which teaches that the will is the vital principle, has begun to spread even to the wider circles of medical science and to meet with a favourable reception from its younger representatives, I notice with particular pleasure in the theses sustained by Dr. Von Sigriz on taking his degree at Munich (August, 1835), which commence as follows: 1. *Sanguis est determinans formam organismi se evolventis.* 2. *Evolutio organica determinatur vitæ internæ actione et* voluntate.

---

[1] Meckel, "A. f. d. P." vol. 5, pp. 195-198.

[2] Burdach, "Physiologie," vol. i. § 259, p. 388.

Lastly, a very remarkable and unexpected corroboration of this part of my doctrine has to be mentioned, which has recently been communicated from ancient Hindoo philosophy by Colebrook. In his exposition of the philosophical schools of the Hindoos,[1] he quotes the following as the doctrine of the Nyaga school: "Volition, Yatna, effort or manifestation of the Will, is a self-determination to act which gives satisfaction. Desire is its occasion, perception its motive. Two kinds of perceptible effort of the will are distinguished: that which springs from desire which seeks the agreeable, and that which springs from aversion which shuns the repulsive. Another species, which escapes sensation and perception, but is inferred from analogy of spontaneous acts, comprises animal functions, having for a cause the vital, unseen power." Here the words "animal functions" are evidently used, not in a physiological, but in a popular sense: so that here organic life is unquestionably derived from the will. We find a similar statement in Colebrook's Report on the Vedas[2] where he says: "*Asu is unconscious volition*, which occasions an act necessary to the support of life, as breathing, &c."

Moreover my reduction of vital energy to the will by no means interferes with the old division of its functions into reproductive force, irritability and sensibility. This division remains a deep view of their difference, and gives occasion for interesting observations.

The faculty of reproduction, objectified in the cellular tissue of plants, constitutes the chief characteristic of

---

[1] "Transactions of the Asiatic Society of Great Britain," 1824, p. 110.

[2] "Asiatic Researches," vol. 8, p. 426.

no. clear concept
ill. if mig
ther come
ncon

plants and the vegetative element in Man. Where we find it predominant to excess in human beings, we assume them to be phlegmatic, dull, indolent, obtuse (Bœotians); though this assumption does not always meet with confirmation. *Irritability*, objectified in the muscular tissue, constitutes the chief characteristic of Animals and the animal element in Man. Where it predominates to excess, dexterity, strength, bravery, that is, fitness for bodily exertion and for war, is usually to be found (Spartans). Nearly all warm-blooded animals and even insects far surpass Man in irritability. It is by irritability that animals are most vividly conscious of their existence; wherefore they exult in manifesting it. There is even still a trace of that exultation perceptible in Man, in dancing. *Sensibility*, objectified in the nerves, is Man's chief characteristic, and constitutes what is properly human in him. In this no animal can in the remotest degree compare with Man. Where it predominates to excess, it produces *genius* (Athenians). Accordingly a man of genius is in a higher degree a *man*. This explains why some men of genius have been unwilling to recognise other men, with their monotonous physiognomies and universal stamp of commonplace mediocrity, as human beings: for in them they did not find their equals and naturally came to the erroneous conclusion that their own was the normal standard. Diogenes sought for men with a lantern in this sense;—in that work of genius, the Koheleth (Ecclesiastes) it is said:[1] "*One* man among a thousand have I found, but one woman among all those have I not found;" and Gracian in his Criticon—perhaps the grandest and most beautiful allegory ever written—says: "But what was strangest of all, in the whole country, even in the most populous cities, they did not meet with a single *man*; on the contrary these cities were inhabited by lions, tigers, leopards, wolves, foxes, apes, oxen, asses, pigs,—nowhere was there a man! They only made out after a time that the few existing human beings, in order to hide themselves and not to witness what was going on, had retired to those desert places which ought to have been the dwellings of wild beasts." The same reason indeed accounts for the peculiar inclination of all men of genius for solitude, to which they are driven by their difference from the rest, and for which their own inner wealth qualifies them. For, with humanity it is as with diamonds, the extraordinarily great ones alone are fitted to be *solitaires*, while those of ordinary size have to be set in clusters to produce any effect.

---

[1] Ecclesiastes, ch. 7, v. 28.

Even the three *Gunas*, or fundamental qualities of the Hindoos, tally with the three physiological fundamental forces. *Tamas-Guna*, obtuseness, stupidity, corresponds to reproductive power; *Rajas-Guna*, passionateness, to irritability; and *Sattwa-Guna*, wisdom and virtue, to sensibility. When however they add to this, that Tamas-Guna is the fate of animals, Rajas-Guna the fate of man, and Sattwa-Guna that of the Gods, this is to be taken in a mythological, rather than physiological sense.

In Chapter 20th of the 2nd Vol. of my chief work entitled "Objectification of the Will in the Animal Organism," I have likewise treated the argument of the present chapter; therefore I advise my readers to read it after this, as a complement to what is here given.[1]

I may observe, that the passages I have quoted from pp. 14 and 15 of my Essay on Colours, refer to the first edition.

---

[1] In my "Parerga," § 94 of the 2nd vol. (§ 96 in the 2nd edition) belongs also to the above.

[illegible]
Spinoza

COMPARATIVE ANATOMY.

NOW, from my proposition: that the Will is what Kant calls the "thing in itself"[1] or the ultimate substratum of every phenomenon, I had however not only deduced that the will is the agent in all inner, unconscious functions of the body, but also that the organism itself is nothing but the will which has entered the region of representation, the will itself, perceived in the cognitive form of Space. I had accordingly said that, just as each single momentary act of willing presents itself at once directly and infallibly in the outer perception of the body as one of its actions, so also must the collective volition of each animal, the totality[2] of its efforts, be faithfully portrayed in its whole body, in the constitution of its organism; and that the means supplied by its organisation for attaining the aims of its will must as a whole exactly correspond to those aims—in short, that the same relation must exist between the whole character of its volition and the shape and nature of its body, as between each single act of its will and the single bodily action which carries it out. Even this too has recently been recognised as a fact, and accordingly been confirmed *à posteriori*, by thoughtful zootomists and physiologists from their own point of view and independently of my doctrine: their judgments on this point make Nature testify even here to the truth of my theory.

---

[1] *Ding an sich.*

[2] *Inbegriff.*

In Pander and d'Alton's admirable illustrated work[1] we find: "Just as all that is characteristic in the formation of bones springs from the *character* of the animals, so does that character, on the other hand, develop out of their *tendencies and desires.* These *tendencies and desires* of animals, which are *so vividly expressed* in their whole organisation and of which that organisation only appears to be the medium, cannot be explained by special primary forces, since we can only deduce their inner reason from the general life of Nature." By this last turn the author shows indeed that he has arrived at the point where, like all other investigators of Nature, he is brought to a standstill by the metaphysical; but he also shows, that up to this point beyond which Nature eludes investigation, *tendencies and desires* (*i.e.* will) were the utmost thing knowable. The shortest expression for his last conclusion about animals would be "As they will, so they are."

The learned and thoughtful Burdach,[2] when treating of the ultimate reason of the genesis of the embryo in his great work on Physiology, bears witness no less explicitly to the truth of my view. I must not, unfortunately, conceal the fact that in a weak moment, misled Heaven knows by what or how, this otherwise excellent man brings in just here a few sentences taken from that utterly worthless, tyrannically imposed pseudo-philosophy, about 'thought' being what is primary (it is just what is last and most conditioned of all) yet 'no representation' (that is to say, a wooden iron). Immediately after however, under the returning influence of his own better self, he proclaims the real truth (p. 710): "The brain curves itself outwards to the retina, because the central part of the embryo *desires* to take in the impressions of the activity of the world; the mucous membrane of the intestinal canal develops into the lung, because the organic body *desires* to enter into relation with the elementary substances of the universe; organs of generation spring from the vascular system, because the individual only lives in the species, and because the life which has commenced in the individual *desires* to multiply." This assertion of Burdach's, which so entirely agrees with my doctrine, reminds me of a passage in the ancient Mahabharata, which it is really difficult not to regard as a mythical version of the same truth. It is in the third Canto of "Sundas and Upasunda" in Bopp's "Ardschuna's Reise zu Indra's Himmel"[1] (1824); Brahma has just created Tilottama, the fairest of women, who is walking round the circle of the assembled gods. Shiva conceives so violent a longing to gaze at her as she turns successively round the circle, that four faces arise in him according to her different positions, that is, according to the four cardinal points. This may account for Shiva being represented with five heads, as Pansh Mukhti Shiva. Countless eyes arise on every part of Indra's body likewise on the same occasion.[2] In fact, every organ must be looked upon as the expression of a universal manifestation of the will, *i.e.* of one made once for all, of a fixed longing, of an act of volition proceeding, not from the individual, but from the species. Every animal form is a longing of the will to live which is roused by circumstances; for instance, the will is seized with a longing to live on trees, to hang on their branches, to devour their leaves, without contention with other animals and without ever touching the ground: this longing presents itself throughout endless time in the form (or Platonic Idea) of the sloth. It can hardly walk at all, being only adapted for climbing; helpless on the ground, it is agile on trees and looks itself like a moss-clad bough in order to escape the notice of its pursuers. But now let us consider the matter from a somewhat more methodical and less poetical point of view.

---

[1] Pander and d'Alton, "Ueber die Skelette der Raubthiere," 1822, p. 7.

[2] Burdach, "Physiologie," vol. 2, § 474.

---

[1] Bopp, "Ardschuna's Reise zu Indra's Himmel, nebst anderen Episoden des Mahabharata" (Ardshuna's Journey to Indra's Heaven together with other episodes from the Mahabharata), 1824.

[2] The Matsya Parana attributes a similar origin to Brahma's fou countenances. It relates that, having fallen in love with his daughte Satarupa, and gazed fixedly at her, she stepped aside to avoid his eye; he being ashamed, would not follow her movement; whereupon a new face arose on him directed towards the side where she was and, on her once more moving, the same thing occurred, and was repeated, until at last he had four faces. ("Asiatic Researches," vol. 6, p. 473.) [Add. to 3rd ed.]

The manifest adaptation of each animal for its mode of life and outward means of subsistence, even down to the smallest detail, together with the exceeding perfection of its organisation, form abundant material for teleological contemplation, which has always been a favourite occupation of the human mind, and which, extended even to inanimate Nature, has become the argument of the Physico-theological Proof. The universal fitness for their ends, the obviously intentional design in all the parts of the organism of the lower animals without exception, proclaim too distinctly for it ever to have been seriously questioned, that here no forces of Nature acting by chance and without plan have been at work, but a will. Now, that a will should act otherwise than under the guidance of knowledge was inconceivable, according to empirical science and views. For, up to my time, as has been shown in the last chapter, *will* and *intellect* had been regarded as absolutely inseparable, nay, the will was looked upon as a mere operation of the intellect, that presumptive basis of all that is spiritual. Accordingly wherever the will acted, knowledge must have been its guide; consequently it must have been its guide here also. But the mediation of knowledge, which, as such, is exclusively directed towards the outside, brings with it, that a will acting by means of it, can only act outwardly, that is, only from *one* being upon *another*. Therefore the will, of which unmistakable traces had been found, was not sought for where these were discovered, but was removed to the outside, and the animal became the product of a will foreign to it, guided by knowledge, which must have been very clear knowledge indeed, nay, the deeply excogitated conception of a purpose; and this purpose must have preceded the animal's existence, and, together with the will, whose product the animal is, have lain outside that animal. According to this, the animal would have existed in representation before existing in reality. This is the basis of the train of thought on which the Physico-theological Proof is founded. But this proof is no mere scholastic sophism, like the Ontological Proof: nor does it contain an untiring natural opponent within itself, like the Cosmological Proof, in that very same law of causality to which it owes its existence. On the contrary, it is, in reality, for the educated, what the Keraunological Proof[1] is for the vulgar,[2] and its plausibility is so great, so potent, that the most eminent and at the same time least prejudiced minds have been deeply entangled in it. Voltaire, for instance, who, after all sorts of other doubts, always comes back to it, sees no possibility of getting over it and even places its evidence almost on a level with that of a

tural
eology?

---

[1] I should like under this name to add a fourth to the three proofs brought forward by Kant, *i.e.* the proof *a terrore*, which the ancient saying of Petronius: *primus in orbe Deos fecit timor*, designates and of which Hume's incomparable "Natural History of Religion" may be considered as the critique. Understood in this sense, even the theologist Schleiermacher's attempted proof might have its truth from the feeling of dependence, though perhaps not exactly that truth which its originator imagined it to have.

[2] Socrates propounded it already in detail in Xenophon. ("Mem." i. 4.) [Add. to 3rd ed.]

mathematical demonstration. Even Priestley too declares it to be irrefutable.[1] Hume's reflection and acumen alone stood the test, even in this case; in his "Dialogues on Natural Religion,"[2] which are so well worth reading, this true precursor of Kant calls attention to the fact, that there is no resemblance at all between the works of Nature and those of an Art which proceeds according to a design. Now it is precisely where he cuts asunder the *nervus probandi* of this extremely insidious proof, as well as that of the two others—in his Critique of Judgment and in his Critique of Pure Reason—that Kant's merit shines most brilliantly. A very brief summary of this Kantian refutation of the Physico-theological Proof may be found in my chief work.[3] Kant has earned for himself great merit by it; for nothing stands so much in the way of a correct insight into Nature and into the essence of things as this view, by which they are looked upon as having been made according to a preconceived plan. Therefore, if a Duke of Bridgewater offers a prize of high value for the confirmation and perpetuation of such fundamental errors, let it be our task, following in the footsteps of Hume and Kant, to work undauntedly at their destruction, without any other reward than truth. Truth deserves respect: not what is opposed to it. Nevertheless here, as elsewhere, Kant has confined himself to negation; but a negation only takes full effect when it has been completed by a correct affirmation, this alone giving entire satisfaction and in itself dislodging and superseding error, according to the words of Spinoza: *Sicut lux se ipsa et tenebras manifestat, sic veritas norma sui et falsi est.* First of all therefore we say: the world is not made with the help of knowledge, consequently also not from the out-

Find Kant's refutation of the Teleological Proof side, but from the inside; and next we endeavour to point out the *punctum saliens*[1] of the world-egg. The physico-theological thought, that Nature must have been regulated and fashioned by an intellect, however well it may suit the untutored mind, is nevertheless fundamentally wrong. For the intellect is only known to us in animal nature, consequently as an absolutely secondary and subordinate principle in the world, a product of the latest origin; it can never therefore have been the condition of the existence of that world.[2] Now the will on the contrary, being that which fills every thing and manifests itself immediately in each—thus showing each thing to be its phenomenon—appears everywhere as that which is primary. It is just for this reason, that the explanation of all teleological facts is to be found in the will of the being itself in which they are observed.

---

[1] Priestley, "Disqu. on Matter and Spirit," sect. 16, p. 188.

[2] Part 7, and in other places.

[3] See "Die Welt als W. u. V." vol. i. p. 597. (Vol. i. p. 631 of the 3rd ed.)

Besides, the Physico-theological Proof may be simply invalidated by the empirical observation, that works produced by animal instinct, such as the spider's web, the bee's honeycomb and its cells, the white ant's constructions, &c. &c., are throughout constituted as if they were the result of an intentional conception, of a wide-reaching providence and of rational deliberation; whereas they are evidently the work of a blind impulse, *i.e.* of a will not guided by knowledge. From this it follows, that the conclusion from such and such a nature to such and such a mode of coming into being, has not the same certainty as the conclusion from a consequent to its reason, which is in all cases a sure one. I have devoted the twenty-seventh chapter of the second volume of my chief work to a detailed consideration of the mechanical instincts of animals, which may be used, together with the preceding one on Teleology, to complete the whole examination of this subject in the present chapter.

---

[1] The point at which the life-spark is kindled. [Tr.]

[2] Nor can a *mundus intelligibilis* precede a *mundus sensibilis;* since it receives its material from the latter alone. It is not an intellect which has brought forth Nature; it is, on the contrary, Nature which has brought forth the intellect. [Add. to 3rd ed.

Now, if we enter more closely into the above-mentioned fitness of every animal's organisation for its mode of life and means of subsistence, the question that first presents itself is, whether that mode of life has been adapted to the organisation, or *vice versa*. At first sight, the former assumption would seem to be the more correct one; since, in Time, the organisation precedes the mode of life, and the animal is thought to have adopted the mode of existence for which its structure was best suited, making the best use of the organs it found within itself: thus, for instance, we think that the bird flies because it has wings, and that the ox butts because it has horns; not conversely. This view is shared by Lucretius (always an ominous sign for an opinion):

> "Nil ideo quoniam natum est in corpore, ut uti
> Possemus; sed, quod natum est, id procreat usum."[1]

Only this assumption does not explain how, collectively, the quite different parts of an animal's organism so exactly correspond to its way of life; how no organ interferes with another, each rather assisting the others and none remaining unemployed; also that no subordinate organ would be better suited to another mode of existence, while the life which the animal really leads is determined by the principal organs alone, but, on the contrary, each part of the animal not only corresponds to every other part, but also to its mode of life: its claws, for instance, are invariably adapted for seizing the prey which its teeth are suited to tear and break, and its intestinal canal to digest: its limbs are constructed to convey it where that prey is to be found, and no organ ever remains unemployed. The ant-bear, for instance, is not only armed with long claws on its fore-feet, in order to break into the nests of the white ant, but also with a prolonged cylindrical muzzle, in order to penetrate into them, with a small mouth and a long, threadlike tongue, covered with a glutinous slime, which it inserts into the white ants' nests and then withdraws covered with the insects that adhere to it: on the other hand it has no teeth, because it does not want them. Who can fail to see that the ant-bear's form stands in the same relation to the white ants, as an act of the will to its motive? The contradiction between the powerful fore-feet and long, strong, curved claws of the ant-bear and its complete lack of teeth, is at the same time so extraordinary, that if the earth ever undergoes a fresh transformation, the newly arising race of rational beings will find it an insoluble enigma, if white ants are unknown to them. The necks of birds, as of quadrupeds, are generally as long as their legs, to enable them to reach down to the ground where they pick up their food; but those of aquatic birds are often a good deal longer, because they have to fetch up their nourishment from under the water while swimming.[1] Moor-fowl have exceedingly long legs, to enable them to wade without drowning or wetting their bodies, and a correspondingly long neck and beak, this last being more or less strong, according to the things (reptiles, fishes or worms) which have to be crushed; and the intestines of these animals are invariably adapted likewise to this end. On the other hand, moor-fowl are provided neither with talons, like birds of prey, nor with web-feet, like ducks: for the *lex parsimoniæ naturæ* admits of no superfluous organ. Now, it is precisely this very law, added to the circumstance, that no organ required for its mode of life is ever wanting in any animal, and that all, even the most heterogeneous, harmonize together and are, as it were, calculated for a quite specially determined way of life, for the element in which the prey dwells, for the pursuit, the overcoming, the crushing and digesting of that prey,—all this, we say, proves, that the animal's structure has been determined by the mode of life by which the animal desired to find its sustenance, and not *vice versa.* It also proves, that the result is exactly the same as if a knowledge of that mode of life and of its outward conditions had preceded the structure, and as if therefore each animal had chosen its equipment before it assumed a body; just as a sportsman before starting chooses his whole equipment, gun, powder, shot, pouch, hunting-knife and dress, according to the game he intends chasing. The latter does not take aim at the wild boar because he happens to have a rifle: he took the rifle with him and not a fowling-piece, because he intended to hunt the wild boar; and the ox does not butt because it happens to have horns: it has horns because it intends to butt. Now, to render this proof complete, we have the additional circumstance, that in many animals, during the time they are growing, the effort of the will to which a limb is destined to minister, manifests itself before the existence of the limb itself, its employment thus anticipating its existence. Young he-goats, rams, calves, for instance, butt with their bare polls before they have any horns; the young boar tries to gore on either side, before its tusks are fully developed which would respond to the intended effect, while on the other hand, it neglects to use the smaller teeth it already has in its mouth and with which it might really bite. Thus its mode of defending itself does not adapt itself to the existing weapons, but *vice versa*. This had already been noticed by Galenus[1] and by Lucretius[2] before him. All these circumstances give us complete certainty, that the will does not, as a supplementary thing proceeding from the intellect, employ those instruments which it may happen to find, or use the parts because just they and no others chance to be there; but that what is primary and original, is the endeavour to live in this particular way, to contend in this manner, an endeavour which manifests itself not only in the employment, but even in the existence of the weapon: so much so indeed, that the use of the weapon frequently precedes its existence, thus denoting that it is the weapon which arises out of the existence of the endeavour, not, conversely, the desire to use it out of the existence of the weapon. Aristotle expressed this long ago, when he said, with reference to insects armed with stings:[3] *διὰ τὸ θυμὸν ἔχειν ὅπλον ἔχει* (*quia iram habent, arma habent*), and further on, generally speaking:[4] Τὰ *δ' ὄργανα πρὸς τὸ ἔργον ἡ φύσις ποιεῖ, ἀλλ' οὐ τὸ ἔργον πρὸς τὰ ὄργανα* (*Natura enim instrumenta ad officium, non officium ad instrumenta accommodat*). From which it follows, that the structure of each animal is adapted to its will.

---

[1] This is expanded, vol. iv. pp. 825-843.

---

[1] I have seen (Zooplast. Cab. 1860) a humming-bird (*colibri*) with a beak as long as the whole bird, head and tail included. This bird must certainly have had to fetch out its food from a considerable depth, were it only from the calyx of a flower (Cuvier, "Anat. Comp." vol. iv. p. 374); otherwise it would not have given itself the luxury, or submitted to the encumbrance, of such a beak.

This truth forces itself upon thoughtful zoologists and zootomists with such cogency, that unless their mind is at the same time purified by a deeper philosophy, it may lead them into strange errors. Now this actually happened to a very eminent zoologist, the immortal De Lamarck, who has acquired everlasting fame by his discovery of the classification of animals in *vertebrata* and *non-vertebrata*, so admirable in depth of view. For he quite seriously maintains and tries to prove[1] at length, that the shape of each animal species, the weapons peculiar to it, and its organs of every sort destined for outward use, were by no means present at the origin of that species, but have on the contrary *come into being* gradually *in the course of time* and through continued generation, in consequence of the exertions of the animal's will, evoked by the nature of its position and surroundings, through its own repeated efforts and the habits to which these gave rise. Aquatic birds and mammalia that swim, he says, have only become web-footed through stretching their toes asunder in swimming; moor-fowl acquired their long legs and necks by wading; horned cattle only gradually acquired horns because as they had no proper teeth for combating, they fought with their heads, and this combative propensity in course of time produced horns or antlers; the snail was originally, like other *mollusca*, without feelers; but out of the desire to feel the objects lying before it, these gradually arose; the whole feline species acquired claws only in course of time, from their desire to tear the flesh of their prey, and the moveable coverings of those claws, from the necessity of protecting them in walking without being prevented from using them when they wished; the giraffe, in the barren, grassless African deserts, being reduced for its food to the leaves of lofty trees, stretched out its neck and forelegs until at last it acquired its singular shape, with a height in front of twenty feet, and thus De Lamarck goes on describing a multitude of animal species as arising according to the same principle, in doing which he overlooks the obvious objection which may be made, that long before the organs necessary for its preservation could have been produced by means of such endeavours as these through countless generations, the whole species must have died out from the want of them. To such a degree may we be blinded by a hypothesis which has once laid hold of us! Nevertheless in this instance the hypothesis arose out of a very correct and profound view of Nature: it is an error of genius, which in spite of all the absurdity it contains, still does honour to its originator. The true part of it belongs to De Lamarck, as an investigator of Nature; he saw rightly that the primary element which has determined the animal's organisation, is the will of that animal itself. The false part must be laid to the account of the backward state of Metaphysics in France, where the views of Locke and of his feeble follower, Condillac, in fact still hold their ground and therefore bodies are held to be things in themselves, Time and Space qualities of things in themselves; and where the great doctrine of the Ideal nature of Space and of Time and of all that is represented in them, which has been so extremely fertile in its results, has not yet penetrated. De Lamarck therefore could not conceive his construction of living beings otherwise than in Time, through succession. Errors of this sort, as well as the gross, absurd, atomic theory of the French and the edifying physico-theological considerations of the English, have been banished for ever from Germany by Kant's profound influence. So salutary was the effect produced by this great mind, even upon a nation capable of subsequently forsaking him to run after charlatanism and empty bombast. But the thought could never enter into De Lamarck's head, that the animal's will, as a thing in itself, might lie outside Time, and in this sense be prior to the animal itself. Therefore he assumes the animal to have first been without any clearly defined organs, but also without any clearly defined tendencies, and to have been equipped only with perception. Through this it learns to

---

[1] Galenus, "De Usu Partium Anim.," i. 1.

[2] Lucretius, v. pp. 1032-1039.

[3] Aristot., "De Part. Animal.," iv. 6: "They have a weapon because they have passion." [Tr.]

[4] *Ibid.* c. 12: "Nature makes the tools for the work, not the work for the tools." [Tr.]

---

[1] De Lamarck, "Philosophie Zoologique," vol. i. c. 7, and "Histoire Naturelle des Animaux sans Vertèbres," vol. i. Introd. pp. 180-212.

Here, it is not [illegible]
it is the intellect which cannot wholly
embrace or understand the will.

know the circumstances in which it has to live and from that knowledge arise its desires, *i.e.* its will, from which again spring its organs or definite embodiment; this last indeed with the help of generation and therefore in boundless Time. If De Lamarck had had the courage to carry out his theory fully, he ought to have assumed a primary animal[1] which, to be consistent, must have originally had neither shape nor organs, and then proceeded to transform itself according to climate and local conditions into myriads of animal shapes of all sorts, from the gnat to the elephant.—But this primary animal is in truth the *will to live*; as such however, it is metaphysical, not physical. Most certainly the shape and organisation of each animal species has been determined by its own will according to the circumstances in which it wished to live; not however as a thing physical in Time, but on the contrary as a thing metaphysical outside Time. The will did not proceed from the intellect, nor did the intellect exist, together with the animal, before the will made its appearance as a mere accident, a secondary, or rather tertiary, thing. It is on the contrary the will which is the *prius*, the thing in itself: its phenomenon (mere representation in the cognitive intellect and its forms of Space and Time) is the animal, fully equipped with all its organs which represent the will to live in those particular circumstances. Among these organs is the intellect also—knowledge itself—which, like the rest of those organs, is exactly adapted to the mode of life of each animal; whereas, according to De Lamarck, it is the will which arises out of knowledge. Behold the countless varieties of animal shapes; how entirely is each of them the mere image of its volition, the evident expression of the strivings of the will which constitute its character! Their difference in shape is only the portrait of their difference in character. Ferocious animals, destined for combat and rapine, appear armed with formidable teeth and claws and strong muscles; their sight is adapted for great distances, especially when they have to mark their prey from a dizzy height, as is the case with eagles and condors. Timid animals, whose will it is to seek their safety in flight instead of contest, present themselves with light, nimble legs and sharp hearing in lieu of all weapons; a circumstance which has even necessitated a striking prolongation of the outer ear in the most timid of them all, the hare. The interior corresponds to the exterior: carnivorous animals have short intestines; herbivorous animals long ones, suited to a protracted assimilation. Vigorous respiration and rapid circulation of the blood, represented by appropriate organs, always accompany great muscular strength and irritability as their necessary conditions, and nowhere is contradiction possible. Each particular striving of the will presents itself in a particular modification of shape. The abode of the prey therefore has determined the shape of its pursuer: if that prey takes refuge in regions difficult of access, in remote hiding places, in night or darkness, the pursuer assumes the form best suited to those circumstances, and no shape is rejected as too grotesque by the will to live, in order to attain its ends. The cross-bill (*loxia curvirostra*) presents itself with this abnormal form of its organ of nutrition, in order to be able to extract the seeds out of the scales of the fir-cone. Moor-fowls appear equipped with extra long legs, extra long necks and extra long beaks, in short, the strangest shapes, in order to seek out reptiles in their marshes. Then we have the ant-bear with its body four feet long, its short legs, its strong claws, and its long, narrow, toothless muzzle provided with a threadlike, glutinous tongue for the purpose of digging out the white ants from their nests. The pelican goes fishing with a huge pouch under its beak in which to pack its fish, when caught. In order to surprise their prey while asleep in the night, owls fly out provided with enormous pupils which enable them to see in the dark, and with very soft feathers to make their flight noiseless and thus permit them to fall unawares upon their sleeping prey without awakening it by their movements. *Silurus, gymnotus* and *torpedo* bring a complete electric apparatus into the world with them, in order to stun their prey before they can reach it; and also as a defence against *their own* pursuers. For wherever anything living breathed, there immediately came another to devour it,[1] and every animal is in a way designed and calculated throughout, down to the minutest detail, for the purpose of destroying some other animal. Ichneumons, for instance, among insects, lay their eggs in the bodies of certain caterpillars and similar *larvæ,* in which they bore holes with their stings, in order to ensure nourishment for their future brood. Now those kinds which feed on *larvæ* that crawl about freely, have short stings not more than about one-third of an inch long, whereas *pimpla manifestator*, which feeds upon *chelostoma maxillosa,* whose *larvæ* lie hidden in old trees at great depth and are not accessible to it, has a sting two inches long; and the sting of the *ichneumon strobillæ* which lays its eggs in *larvæ* dwelling in fir-cones, is nearly as long. With these stings they penetrate to the *larva* in which they bore a hole and deposit one egg, whose product subsequently devours this *larva*.[1] Just as clearly does the will to escape their enemies manifest itself in the defensive equipment of animals that are the objects of pursuit. Hedgehogs and porcupines raise up a forest of spears; armadillos, scaly ant-eaters and tortoises appear cased from head to foot in armour which is inaccessible to tooth, beak or claw; and so it is, on a smaller scale, with the whole class of *crustacea*. Others again seek protection by deceiving their pursuers rather than by resisting them physically: thus the sepia has provided itself with materials for surrounding itself with a dark cloud on the approach of danger. The sloth is deceptively like its moss-clad bough, and the frog its leaf; and many insects resemble their dwelling-places. The negro's louse is black;[2] so, to be sure, is our flea also; but the latter, in providing itself with an extremely powerful apparatus for making irregular jumps to a considerable distance, trusted to these for protection.—We can however make the anticipation in all these arrangements more intelligible to ourselves by the same anticipation which shows itself in the mechanical instincts of animals. Neither the young spider nor the ant-lion know the prey for which they lay traps, when they do it for the first time. And it is the same when they are on the defensive. According to Latreille, the insect *bombex* kills the *parnope* with its sting, although it neither eats it nor is attacked by it, simply because the *parnope* will lay its eggs in the *bombex's* nest, and by doing this will interfere with the development of its eggs; yet it does not know this. Anticipations of this kind once more confirm the ideal nature of Time, which indeed always becomes manifest as soon as the will as thing in itself is in question. Not only with respect to the points here mentioned, but to many others besides, the mechanical instincts and physiological functions of animals serve to explain each other mutually, because the will without knowledge is the agent in both.

---

[1] *Urthier.*

---

[1] Animated by the feeling of this truth, Robert Owen, after passing in review the numerous and often very large Australian fossile *marsupialia*—sometimes as big as the rhinoceros—came as early as 1842 to the conclusion, that a large beast of prey must have contemporaneously existed. This conclusion was afterwards confirmed, for in 1846 he received part of the fossile skull of a beast of prey of the size of the lion, which he named *thylacoleo, i.e.* lion with a pouch, since it is also a marsupial. (See the "Times" of the 19th of May, 1866, where there is an article on "Palæontology," with an account of Owen's lecture at the Government School of Mines. [Add. to 3rd ed.]

---

[1] Kirby and Spence, "Introduction to Entomology," vol. i. p. 355. [Add. to 3rd ed.]

[2] Blumenbach, "De hum. gen. variet. nat." p. 50. Sömmering, "On the Negro," p. 8.

As the will has equipped itself with every organ and every weapon, offensive as well as defensive, so has it likewise provided itself in every animal shape with an *intellect*, as a means of preservation for the individual and the species. It was precisely in this account that the ancients called the intellect the ἡγεμονικόν, *i.e.* the guide and leader. Accordingly the intellect, being exclusively destined to serve the will, always exactly corresponds to it. Beasts of prey stood in greater need of intellect, and in fact have more intelligence, than herbivorous animals. The elephant certainly forms an exception, and so does even the horse to a certain extent; but the admirable intelligence of the elephant was necessary on account of the length of its life (200 years) and of the scantiness of its progeny, which obliged it to provide for a longer and surer preservation of the individual: and this moreover in countries teeming with the most rapacious, the strongest and the nimblest beasts of prey. The horse too has a longer life and a scantier progeny than the ruminants, and as it has neither horns, tusks, trunk, nor indeed any weapon save perhaps its hoofs, it needed greater intelligence and swiftness in order to elude pursuit. Monkeys needed their extraordinary intelligence, partly because of the length of their life, which even in the moderate-sized animal extends to fifty years; partly also because of their scanty progeny, which is limited to one at a time, but especially because of their *hands*, which, to be properly used, required the direction of an understanding. For monkeys depend upon their hands, not only for their defence by means of outer weapons such as sticks and stones, but also for their

the Stoics

nourishment, this last necessitating a variety of artificial means and a social and artificial system of rapine in general, the passing from hand to hand of stolen fruit, the placing of sentinels, &c. &c. Add to this, that it is especially in their youth, before they have attained their full muscular development, that this intelligence is most prominent. In the *pongo* or ourang-outang for instance, the brain plays a far more important part and the understanding is much greater during its youth than at its maturity, when the muscular powers having attained full development, they take the place of the proportionately declining intellect. This holds good of all sorts of monkeys, so that here therefore the intellect acts for a time vicariously for the yet undeveloped muscular strength. We find this process discussed at length in the "Résumé des Observations de Fr. Cuvier sur l'instinct et l'intelligence des animaux," par Flourens (1841), from which I have quoted the whole passage referring to this question in the second volume of my chief work, at the end of the thirty-first chapter, and this is my only reason for not repeating it here. On the whole, intelligence gradually increases from the rodents[1] to the ruminants, from the ruminants to the pachyderms, and from these again to the beasts of prey and finally to the *quadrumana*, and anatomy shows a gradual development of the brain in similar order which corresponds to this result of external observation. (According to Flourens and Fr. Cuvier.)[1] Among the reptiles, serpents are the most intelligent, for they may even be trained; this is so, because they are beasts of prey and propagate more slowly than the rest —especially the venomous ones. And here also, as with the physical weapons, we find the will everywhere as the *prius;* its equipment, the intellect, as the *posterius.* Beasts of prey do not hunt, nor do foxes thieve, because they have more intelligence; on the contrary, they have more intelligence, just as they have stronger teeth and claws too, because they wished to live by hunting and thieving. The fox even made up at once for his inferiority in muscular power and strength of teeth by the extraordinary subtility of his understanding. Our thesis is singularly illustrated by the case of the bird *dodo* or *dronte* (*didus ineptus*) on the island of Mauritius, whose species, it is well known, has died out, and which, as its Latin name denotes, was exceedingly stupid, and this explains its disappearance; so that here it seems indeed as if Nature had for once gone too far in her *lex parsimoniæ* and thereby in a sense brought forth an abortion in the species, as she so often does in the individual, which was unable to subsist, precisely because it was an abortion. If, on this occasion, anyone were to raise the question as to whether Nature ought not to have provided insects with at least sufficient intelligence to prevent them from flying into the flame of a candle, our answer would be: most certainly; only she did not know that men would make candles and light them, and *natura nihil agit frustra.* Insect intelligence is therefore only insufficient where the surroundings are artificial.[2]

---

[1] That the lowest place should be given to the rodents, seems however to proceed from *à priori* rather than from *à posteriori* considerations: that is to say, from the circumstance, that their brain has extremely faint or small convolutions; so that too much weight may have been given to this point. In sheep and calves the convolutions are numerous and deep, yet how is it with their intelligence? The mechanical instincts of the beaver are again greatly assisted by its understanding, and even rabbits show remarkable intelligence (see Leroy's beautiful work: "Letters Philosophiques sur l'Intelligence des Animaux," lettre 3, p. 149). Even rats give proof of quite uncommon intelligence, of which some remarkable instances may be found in the "Quarterly Review," No. 201, Jan.-March, 1857, in a special article entitled "Rats."

---

[1] The most intelligent birds are also birds of prey, wherefore many ot them, especially falcons, are highly susceptible of training. [Add. to 3rd ed.]

[2] That the negroes should have become the special victims of the slave-trade, is evidently a consequence of the inferiority of their intelli

Everywhere indeed intelligence depends in the first instance upon the cerebral system, and this stands in a necessary relation to the rest of the organism; therefore cold-blooded animals are greatly inferior to warm-blooded ones, and invertebrate animals to *vertebrata*. But the organism is precisely nothing but the will become visible, to which, as that which is absolutely *prius*, everything constantly refers. The needs and aims of that will give in each phenomenon the rule for the means to be employed, and these means must harmonize with one another. Plants have no self-consciousness because they have no power of locomotion; for of what use would self-consciousness be to them unless it enabled them to seek what was salutary and flee what was noxious to them? And conversely, of what use could power of locomotion be to them, as they have no self-consciousness with which to guide it. The inseparable duality of Sensibility and Irritability does not yet appear therefore in the plant; they continue slumbering in the reproductive force which is their fundament, and in which alone the will here objectifies itself. The sun-flower, and every other plant, wills for light; but as yet their movement towards light is not separate from their apprehension of it, and both coincide with their growth.—Human understanding, which is so superior to that of all other beings, and is assisted by Reason (the faculty for non-perceptible representations, *i.e.* for conceptions; reflection, thinking faculty), is nevertheless only just proportionate, partly to Man's requirements, which greatly surpass those of animals and multiply to infinity; partly to his entire lack of all natural weapons and covering, and to his relatively weaker muscular strength, which is greatly inferior to that of monkeys of his own size;[1] lastly also, to the slowness with which his

---

gence compared with that of other human races; though this by no means justifies the fact. [Add. to 3rd ed.]

[1] As is likewise his capacity for escaping from his pursuers; for in

race multiplies and the length of his ch
which demand secure preservation of th
these great requirements had to be sat
intellectual powers, which, for this reason,
him. But we find the intellect secondary and sub
everywhere, and destined exclusively to serve the purposes of the will. As a rule too, it always remains true to its destiny and subservient to the will. How nevertheless, it frees itself in particular instances from this bondage through an abnormal preponderance of cerebral life, whereby purely objective cognition becomes possible which may be enhanced to genius, I have shown at length in the æsthetic part of my chief work.[1]

Now, after all these reflections upon the precise agreement between the will and the organisation of each animal, if we inspect a well-arranged osteological collection from this point of view, it will certainly seem to us as if we saw one and the same being (De Lamarck's primary animal, or, more properly, *the will to live*) changing its shape according to circumstances, and thus producing all this multiplicity of forms out of the same number and arrangement of its bones, by prolonging and curtailing, strengthening and weakening them. This number and arrangement of the bones, which Geoffroy de St. Hilaire[2] called the anatomical element, continues, as he has thoroughly shown, in all essential points unchanged: it is a constant magnitude, something which is absolutely given beforehand, irrevocably fixed by an unfathomable necessity—an immutability which I should compare with the permanence of matter in all physical and chemical

---

this respect all the four-footed mammalia surpass him. [Add. to 3rd ed.]

[1] [See Third Book of the W. a. W. u. V.; later also, in my "Parerga," vol. ii. §§ 50-57 and § 206. (§§ 51-58, and § 210 of the 2nd edition.)

[2] "Principes de Philosophie Zoologique," 1830.

changes: but to this I shall soon return. Conjointly with this immutability of the anatomical element, we have the greatest susceptibility to modification, the greatest plasticity and flexibility of these same bones with reference to size, shape and adaptation to different purposes, all which we see determined by the will with primary strength and freedom according to the aims prescribed to it by external circumstances: it makes out of these materials whatever its necessity for the time being requires. If it desires to climb about in trees, it catches at the boughs at once with four hands, while it stretches the *ulva* and *radius* to an excessive length and immediately prolongs the *os coccygis* to a curly tail, a yard long, in order to hang by it to the boughs and swing itself from one branch to another. If, on the other hand, it desires to crawl in the mud as a crocodile, to swim as a seal, or to burrow as a mole, these same arm-bones are shortened till they are no longer recognisable; in the last case the *metacarpus* and *phalanges* are enlarged to disproportionately large shovel-paws, to the prejudice of the other bones. But if it wishes to fly through the air as a bat, not only are the *os humeri, radius* and *alnus* prolonged in an incredible manner, but the usually small and subordinate *carpus, metacarpus* and *phalanges digitorum* expand to an immense length, as in St. Anthony's vision, outmeasuring the length of the animal's body, in order to spread out the wing-membrane. If, in order to browse upon the tops of very tall African trees, it has, as a giraffe, placed itself upon extraordinarily high fore-legs, the same seven *vertebræ* of the neck, which never vary as to number and which, in the mole, were contracted so as to be no longer recognisable, are now prolonged to such a degree, that here, as everywhere else, the neck acquires the same length as the fore-legs, in order to enable the head to reach down to drinking-water. But where, as is the case when it appears as the elephant, a long neck could not have borne the weight of the enormous, unwieldy head—a weight increased moreover by tusks a yard long—the neck remains short, as an exception, and a trunk is let down as an expedient, to lift up food and draw water from below and also to reach up to the tops of trees. In accordance with these transformations, we see in all of them the skull, the receptacle containing the understanding, at the same time proportionately expand, develop, curve itself, as the mode of procuring nourishment becomes more or less difficult and requires more or less intelligence; and the different degrees of the understanding manifest themselves clearly to the practised eye in the curves of the skull.

Now, in all this, that *anatomical element* we have mentioned above as fixed and invariable, certainly remains in so far an enigma, as it does not come within the teleological explanation, which only begins after the assumption of that element; since the intended organ might in many cases have been rendered equally suitable for its purpose even with a different number and disposition of bones. It is easy to understand, for instance, why the human skull should be formed out of eight bones: that is, to enable them to be drawn together by the fontanels during birth; but we do not see why a chicken which breaks through its egg-shell should necessarily have the same number of skull-bones. We must therefore assume this anatomical element to be based, partly on the unity and identity of the will to live in general, partly on the circumstance, that the archetypal forms of animals have proceeded one from the other,[1] wherefore the fundamental type of the whole race was preserved. It is this anatomical element which Aristotle means by his ἀναγκαία φύσις, and the mutability of its shapes according to diffe-

---

[1] "Parerga," vol. ii. § 91; § 93 of the 2nd edition.

Here is all pure Aristotle natural teleology

rent purposes he calls τὴν κατὰ λόγον φύσιν,[1] and explains by it how the material for upper incisors has been employed for horns in horned cattle. Quite rightly: since the only ruminants which have no horns, the camel and the musk-ox, have upper incisors, and these are wanting in all horned ruminants.

No other explanation or assumption enables us nearly as well to understand either the complete suitableness to purpose and to the external conditions of existence I have here shown in the skeleton, or the admirable harmony and fitness of internal mechanism in the structure of each animal, as the truth I have elsewhere firmly established: that the body of an animal is precisely nothing but the *will itself* of that animal brought to cerebral perception as representation—through the forms of Space, Time and Causality—in other words, the mere visibility, objectivity of the Will. For, if this is once pre-supposed, everything in and belonging to that body must conspire towards the final end: the life of this animal. Nothing superfluous, nothing deficient, nothing inappropriate, nothing insufficient or incomplete of its kind, can therefore be found in it; on the contrary, all that is required must be there, and just in the proportion needed, never more. For here artist, work and materials are one and the same. Each organism is therefore a consummate master-piece of exceeding perfection. Here the will did not first cherish the intention, first recognise the end and then adapt the means to it and conquer the material; its willing was rather immediately the aim and immediately the attainment of that aim; no foreign appliances needing to be overcome were wanted—willing, doing and attaining were here one and the same. Thus the organism presents itself as a miracle which admits of no comparison with any work

lead: life of animal

on beauty

---

[1] See Aristotle, "De Partibus Animalium," iii. c. 2 *sub finem*: πῶς δὲ τῆς αναγκαίας φύσεως κ. τ. λ.

of human artifice wrought by the lamplight of knowledge.[1]

Our admiration for the consummate perfection and fitness for their ends in all the works of Nature, is at the bottom based upon our viewing them in the same light as we do our own works. In these, in the first place, the will to do the work and the work are two different things; then again two other things lie between these two: firstly, the medium of representation, which, taken by itself, is foreign to the will, through which the will must pass before it realizes itself here; and secondly the material foreign to the will here at work, on which a form foreign to it has to be forced, which it resists, because the material already belongs to another will, that is to say, to its own nature, its *forma substantialis*, the (Platonic) idea, expressed by it: therefore this material has first to be overcome, and however deeply the artificial form may have penetrated, will always continue inwardly resisting. It is quite a different thing with Nature's works, which are not, like our own, indirect, but on the contrary, direct manifestations of the will. Here the will acts in its primordial nature, that is, unconsciously. No mediating representation here separates the will and the work: they are one. And even the material is one with them: for matter is the mere visibility of the will. Therefore here we find Matter completely permeated by Form; or, better still, they are of quite the same origin, only existing mutually one for the other; and in so far they are one. That we separate them in works of Nature as well as in works of Art, is a mere abstraction. Pure Matter, absolutely without Form or quality, which we think as the material of a product of Nature, is merely an *ens rationis* and cannot enter into any experience; whereas the material of a work of Art is empirical Matter, consequently already has a Form. The [distinctive] character of Nature's products is the identity of form and substance; that of products of Art the diversity of these two.[1] It is because Matter is the mere visibility of Form in Nature's products, that, even empirically, we see Form appear as a mere production of Matter, bursting forth from its inside in crystallisation, in vegetable and animal *generatio æquivoca*, which last cannot be doubted, at any rate in the *epizoa*.[2]—For this reason we may even assume that nowhere, either on any planet or satellite, will Matter come to a state of endless repose, but rather that its inherent forces (*i.e.* the will, whose mere visibility it is) will always put an end again to the repose which has commenced, always awaking again from their sleep, to resume their activity as mechanical, physical, chemical, organic forces; since at all times they only wait for the opportunity to do so.

---

[1] The appearance of every animal therefore presents a totality, a unity, a perfection and a rigidly carried out harmony in all its parts which is so entirely based upon a single fundamental thought, that even the strangest animal shape seems to the attentive observer as if it were the only right, nay, only possible form of existence, and as if there could be no other than just this very one. The expression "natural" used to denote that a thing is a matter of course, and that it cannot be otherwise, is in its deepest foundation based upon this. Göthe himself was struck by this unity when contemplating whelks and crabs at Venice, and it caused him to exclaim: "How delightful, how glorious is a living thing! how well adapted for its condition; how true, how real!" ("Life," vol. iv. p. 223). No artist therefore, who has not made it his business to study such forms for years and to penetrate into their meaning and comprehension, can rightly imitate them. Without this study his work will seem as if it were pasted together: the parts no doubt will be there, but the bond which unites them and gives them cohesion, the spirit, the idea, which is the objectivity of the primary act of the will presenting itself as this or that particular species, will be wanting. [Add. to 3rd ed.]

---

[1] It is a great truth which Bruno expresses ("De Immenso et Innumerabili," 8, 10): "*Ars tractat materiam alienam: natura materiam propriam. Ars circa materiam est; natura interior materiæ.*" He treats this subject much more fully, "Della Causa," Dial. 3, p. 252 *et seqq.* Page 255 he declares the *forma substantialis* to be the form of every product of Nature, which is the same as the *soul*. [Add. to 3rd ed.]

[2] Thus the saying of the Schoolmen is verified: "*Materia appetit formam.*" See "Die Welt a. W. u. V." 3rd edition, vol. ii. p. 352. [Add. to 3rd ed.]

But if we want to understand Nature's proceeding, we must not try to do it by comparing her works with our own. The real essence of every animal form, is an act of the will outside representation, consequently outside its forms of Space and Time also; which act, just on that account, knows neither sequence nor juxtaposition, but has, on the contrary, the most indivisible unity. But when our cerebral perception comprehends that form, and still more when its inside is dissected by the anatomical knife, then that which originally and in itself was foreign to knowledge and its laws, is brought under the light of knowledge; but then also, it has to present itself in conformity with the laws and forms of knowledge. The original unity and indivisibility of that act of the will, of that truly metaphysical being, then appears divided into parts lying side by side and functions following one upon another, which all nevertheless present themselves as connected together in closest relationship one to another for mutual help and support, as means and ends one to the other. The understanding, in thus apprehending these things, now perceives the original unity re-establishing itself out of a multiplicity which its own form of knowledge had first brought about, and involuntarily taking for granted that its own way of perceiving this is the way in which this animal form comes into being, it is now struck with admiration for the profound wisdom with which those parts are arranged, those functions combined. This is the meaning of Kant's great doctrine, that Teleology is brought into Nature by our own understanding, which accordingly wonders at a

But here he [illegible] "design" [illegible]
+ says the "appearance" of the
is only a phenomenon

miracle of its own creation.[1] If I may use a trivial simile to elucidate so sublime a matter, this astonishment very much resembles that of our understanding when it discovers that all multiples of 9, when their single figures are added together, give as their product either the number 9 or one whose single figures again make 9; yet it is that very understanding itself which has prepared for itself this surprise in the decimal system. According to the Physico-theological argument, the actual existence of the world has been preceded by its existence in an intellect: if the world is designed for an end, it must have existed as representation before it came into being. Now I say, on the contrary, in Kant's sense: if the world is to be representation, it must present itself as designed for an end; and this only takes place in an intellect.

It undoubtedly follows from my doctrine, that every being is its own work. Nature, which is incapable of falsehood and is as *naïve* as genius, asserts the same thing downright; since each being merely kindles the spark of life at another exactly similar being, and then makes itself before our eyes, taking the materials for this from outside, form and movement from its own self: this process we call growth and development. Thus, even empirically, each being stands before us as its own work. But Nature's language is not understood because it is too simple.

---

[1] Compare "Die Welt a. W. u. V." 3rd edition, vol. II. p. 375. [Add. to 3rd ed.]

PHYSIOLOGY OF PLANTS.

THE corroborations I am now about to bring forward of the phenomenon of the will in plants, proceed chiefly from French sources, from a nation whose tendencies are decidedly empirical and which is reluctant to go a step beyond what is immediately given. The informant moreover is Cuvier, whose rigid adherence to the purely empirical gave rise to the famous dispute between him and Geoffroy de St. Hilaire. So we must not be astonished if the language we meet with here is less decided than in the preceding German corroborations and if we find each concession made with cautious reserve.

In his "Histoire des Progrès des Sciences Naturelles depuis 1789 jusqu' á ce jour,"[1] Cuvier says: "Plants have certain apparently spontaneous movements, which they show under certain circumstances and which at times so closely resemble those of animals, that a sort of feeling and *will* might almost be attributed to plants on this account, especially by those who think they can perceive something of the same kind in the movements of the *inward* parts of animals. Thus the tops of trees always have a vertical tendency, excepting when they incline towards the light. Their roots seek out good earth and moisture and, in order to attain these, deviate from the straight course. Yet these different tendencies cannot be explained by the influence of external causes, unless we also assume the existence of an inner natural disposition, susceptible of being roused, which differs from the mere mechanical force in inorganic bodies . . . . . Decandolle made some remarkable experiments that proved to him the existence of a sort of habit in plants which may be overcome by artificial light, but only after a certain time. Plants that had been shut up in a cellar which was continually lit by lamps, did not on this account leave off closing in the evening and opening again in the morning for several days. And there are other habits besides which plants are able to adopt and to abandon. Flowers that habitually close in wet weather, finish by remaining open if the wet weather lasts too long. When M. Desfontaines took a sensitive-plant with him in his carriage, the jolting movement at first caused it to contract, but at last it expanded again as when in complete repose. Therefore even in these cases, light, moisture, &c., &c., only act in virtue of an inner disposition, which may be neutralized or modified by the continuation of that very activity itself; and the vital energy of plants, like that of animals, is subject to fatigue and exhaustion. The *hedysarum gyrans* is singularly characterized by the movements of its leaves which continue day and night without needing any sort of stimulus. Surely, if any phenomenon can cause illusion and remind us of the voluntary movements of animals, it is this. Broussonet, Silvestre, Cels and Halle have fully described it, and have shown that the plant's action depends entirely upon its own healthy condition."

---

[1] Vol. i. p. 245. 1826.

Again, in the third volume of the same work, p. 166 (1828), Cuvier says: "M. Dutrochet adds some physiological considerations to which his own experiments had led him, and which in his opinion prove that the movements of plants are *spontaneous*, *i.e.* that they depend upon an inner principle which immediately receives the influence of outer agencies. As he is however reluctant to admit that plants have feeling, he makes use of the word '*nervimotilité*.'"—Here I must observe, that when we come to examine it closely, what we think to ourselves in the conception of *spontaneity*, is in the end always the same thing as manifestation of will, with which spontaneity would therefore be simply synonymous. The only difference between them consists in the conception of spontaneity being derived from outer perception, while that of manifestation of will is drawn from our own consciousness.—I find a remarkable instance of the impetuous violence of this spontaneity, even in plants, in the following communication contained in the "Cheltenham Examiner:"[1] "Last Thursday four enormous mushrooms performed a heroic feat of a new kind, in one of our most crowded streets, by lifting up a huge block of stone in their strenuous effort to make their way into the visible world."

In the "Mém. de l'Acad. d. Sciences de l'année" (1821), Cuvier says[2]:—"For centuries botanists have been searching for the reason why in a seed which is germinating the root invariably grows downwards, while the stalk as invariably grows upwards, no matter what be the position in which the seed is placed. M. Dutrochet put some seeds into holes bored in the bottom of a vessel filled with damp mould, which he hung up to a beam in his room. Now, in this case, the stem might have been expected to grow downwards. Not at all: the roots found their way to the air below, and the stems were prolonged so as to traverse the damp mould until they reached its upper surface. According to M. Dutrochet, the direction in which plants grow, is determined by an inner principle and not at all by the attraction of the bodies towards which they direct themselves. A mistletoe seed that was fastened to the point of a perfectly moveable needle fixed on a peg, with a small plank placed near it, was induced to germinate. It soon began to send out shoots towards the plank, which it reached in five days without having communicated the slightest movement to the needle. The stems of onions and leeks with their bulbs, deposited in dark places, grow upwards, although more slowly than in light ones: they grow upwards even if placed in water: a fact which suffices to prove that neither light nor moisture determines the direction of their growth."—Still C. H. Schultz asserts[1] that he made seeds germinate in a dark box with holes bored in the bottom, and succeeded in inducing the plants to grow upside down, by means of a mirror fastened to the box, which reflected the sunlight.

---

[1] Repeated in the "Times" of June 2nd, 1841.

[2] Vol. v. p. 171. Paris, 1826.

In the "Dictionnaire des Sciences Naturelles" (article *Animal*) we find: "If, on the one hand, animals show avidity in their search after nourishment as well as power of discrimination in the selection of it, roots of plants may, on the other hand, be observed to direct themselves towards the side where the soil contains most nourishment, nay, even to seek out the smallest crevices in rocks which may contain any food. If we twist a bough so as to make the upper surface of its leaves the under one, these leaves even will twist their stems in order to regain the position best suited for the exercise of their functions (*i.e.* so as to have the smooth side uppermost). Is it quite certain that this takes place unconsciously?"

F. J. Meyen has devoted a chapter, entitled "Of the movements and sensations of plants," to a full investigation of the subject now before us. In this he says[2]: "Not unfrequently potatoes, stored in deep, dark cellars, may be observed towards summer to shoot forth stems which invariably grow in the direction of the chinks through which the light comes into the cellar, and to continue thus growing until they at last reach the aperture which receives the light directly. In such cases potato-stalks have been known to reach a length of twenty feet; whereas under ordinary circumstances, even such as are most favourable to the growth of the potato, the stalk is seldom longer than from three to four feet. It is interesting to watch closely the course taken by a potato-stalk thus growing in darkness, in its endeavours to reach the light. It tries to do so by the shortest road, but not being firm enough to grow straight across through the air without support, it lets itself drop on to the floor, and thus creeps along the ground till it reaches the nearest wall, up which it then climbs." Even this botanist too is led by his facts to the following assertion (p. 576): "On observing the freedom of movement of *oscillatoria* and other inferior plants, we may perhaps have no alternative but to attribute a species of *will* to these beings."

---

[1] C. H. Schultz, "Sur la Circulation dans les Plantes," a prize-essay, 1839.

[2] F. J. Meyen, "Neues System der Pflanzenphysiologe" (1839), vol. iii. p. 585.

Creepers bear distinct evidence as to manifestation of will in plants; for, when they find no support near enough for their tendrils to cling to, they invariably direct their growth towards the shadiest place, or even towards a piece of dark-coloured paper, wherever it may be placed; whereas they avoid glass, on account of its glitter. In the "Philosophical Transactions" of 1812, Th. Andrew Knight relates some very pleasing experiments on this subject (especially with *ampelopsis quinquefolia*,)[1] although he strives hard to explain the matter mechanically, and will not admit that it is a manifestation of will. I appeal to his experiments, not to the conclusions he draws from them. A good test might be, to plant several free creepers in a circle round a tree-trunk and to observe whether they all crept towards the trunk centripetally. On the 6th Nov. 1843, Dutrochet read a treatise on this subject in the "Acad. de Sciences" called "Sur les Mouvements Révolutifs spontanés chez les Végétaux," which, notwithstanding its great length, is well worth reading, and is published among the "Comptes rendus des Séances de l'Académie des Sciences" for Nov. 1843. The result is, that in *pisum sativum* (green pea), in *bryonia alba* (wild bryony) and in *cucumis sativus* (cucumber) the stems of those leaves which bear the tendrils, describe a very slow circular movement in the air, the time in which they complete an ellipsis varying from one to three hours according to temperature. By this movement they seek at random for solid bodies round which, when found, they twine their tendrils; these then support the plant, it being unable to stand by itself without help. That is, they do the same thing as the eyeless caterpillar, which when seeking a leaf describes circles in the air with the upper part of its body. Dutrochet contributes a good deal of information too concerning other movements in plants in this treatise: for instance, that *stylidium graminifolium* in New Holland, has a column in the middle of its *corolla* which bears the anthers and *stigma* and alternately folds up and unfolds again. What Treviranus adduces is to the same effect:[1] In *parnassia palustris* and in *ruta graveolens*, the stamina incline one after the other, in *saxifraga tridactylites* in pairs, towards the stigma, and erect themselves again in the same order."—Shortly before however, we read in Treviranus with reference to this subject: "Of all apparently voluntary movements of plants, the direction of their boughs and of the upper surface of their leaves towards the light and towards moist heat, and the twining movements of creepers round their supports, are the most universal. In this last phenomenon especially there is something which resembles animal movements. While growing, creepers, it is true, if left to themselves, describe circles with their tips and by this means reach an object near at hand. But it is no merely mechanical cause that induces them to adapt their growth to the form of the object they have thus reached. The *cuscuta* does not twine round every kind of support: for instance, limbs of animals, dead vegetable matter, metals and inorganic substances are not used for this purpose, but only living plants, and not even all kinds—not mosses, for instance—only those from which it can extract nourishment by its *papillæ*; and these attract it from a considerable distance."[1] The following special observation, communicated to the "Farmer's Magazine," and reproduced by the "Times" (13th July 1848) under the title "Vegetable Instinct," is however still more to the point: "If a basin of water be placed within six inches of a young pumpkin-stalk, or of a stem of the large garden pea, no matter on what side, the stalk will approach the basin during the night and it will be found next morning with one of its leaves floating on the water. This experiment may be renewed every night till the plant begins to fructify.—Even if its position be changed every day, a stick fixed upright within six inches of a young convolvulus is sure to be found by the plant. If, after having wound itself for a certain distance round the stick, it is unwound and wound round again in the opposite direction, it will return to its original position or lose its life in the endeavour to do so. Nevertheless, if two such plants grow close to one another without having any stick near enough for them to cling to it, one of them will change the direction of its winding and they will twine round each other. Duhamel placed some Italian beans in a cylinder filled with moist earth; after a little while they began to germinate and naturally sent their *plumula* upwards in the direction of the light and their *radicula* downwards into the mould. After a few days the cylinder was turned round to the extent of a quarter of its circumference and the same process was repeated until it had been turned completely round. The beans were then removed from the earth, when it was found that both *plumula* and *radicula* had twisted at each turn that had been given, in order to adapt themselves to it, the one endeavouring to rise perpendicularly, the other to descend, so that they had formed a complete spiral. Yet, notwithstanding this natural tendency to descend, when the soil below is too dry, roots will grow upwards in order to reach any moist substance which may be lying higher than themselves."

---

[1] These have been translated for the "Bibliothèque Britannique, Section des Sciences et Arts," vol. lii

---

[1] Treviranus, "Die Erscheinungen und Gesetze des Organischen Lebens" (Phenomena and Laws of Organic Life), vol. i. p. 173.

---

[1] Brandis, "On Life and Polarity," 1836, p. 88, says: "The roots of rock-plants seek nourishing mould in the most delicate crevices of rocks. These roots cling to a nourishing bone in dense clusters. I saw a root whose growth was intercepted by the sole of an old shoe: it divided itself into as many fibres as the shoe-sole had holes—those by which it had been stitched together—but as soon as these fibres had overcome the obstruction and grown through the holes, they united again to a common stem." And p. 87: "If Sprengel's observations are confirmed, even mediate relations are perceived (by plants) in order to obtain this end (fructification): that is to say, the anthers of the *nigella* bend down in order to put the pollen on the bees' backs, and the pistils bend in like manner to receive it from the bees. [Add. to 3rd ed.]

In Froriep's "Memoranda" for 1833 (No. 832) there is a short article upon the locomotivity of plants: in poor soil, where good mould lies near at hand, many plants will send out a shoot into the good mould; after a time the original plant then withers, but the offshoot prospers and itself becomes the plant. By means of this process, a plant has been known to climb down from a wall.

In the same periodical (1835, No. 981) is to be found a communication from Professor Daubeny, of Oxford (taken from the "Edinburgh New Philosophical Journal," April-July, 1835), in which he shows with certainty, by means of new and very careful experiments, that roots of plants have, at any rate to a certain degree, the power to make choice from those substances in the soil which present themselves to their surface.[1]

---

[1] In this connection I may mention an analysis of an entirely different kind, given by the French Academician Babinet in an article in which he treats of the seasons on the planets. It is contained in the No. of the 15th January, 1856, of the "Revue des Deux Mondes," and I will give the chief substance of it here in translation. The object of it is to refer to its direct cause the well-known fact, that cereals only thrive in temperate climates. "If grain did not necessarily perish in winter, if it were perennial, it would not bear ears, and there would be no harvest. In the hotter portions of Africa, Asia and America, where no winter kills the grain, these plants grow like grass with us: they multiply by means of shoots, remain always green, and neither form ears nor run to seed. In cold climates, on the contrary, the organism of these plants seems by some inconceivable miracle to feel, as it were by anticipation, the necessity of passing through the seed-phase in order to escape dying off in the winter season (*L'organisme de la plante*, par un inconcevable miracle, *semble préssentir la necessité de passer par l'état de graine, pour ne pas périr complètement pendant la saison rigoureuse*). In a similar way, districts which have a "droughty season,"—that is to say a season in which all plants are parched up with drought—"tropical countries, for instance Jamaica, produce grain; because there the plant, moved by the same organic presentiment (*par le même* pressentiment organique), in order to multiply, hastens to bear seed at the approach of the season in which it would have to dry up." In the fact which this author describes as an inconceivable miracle, we recognise a manifestation of the plant's will in increased potency, since here it appears as the will of the species, and makes preparations for the future in a similar way to animal instinct, without being guided by knowledge of that future in doing so. Here we see plants in warmer climates dispensing with a complicated process to which a cold climate alone had obliged them. In similar instances animals do precisely the same thing, especially bees. Leroy in his admirable work "Lettres Philosophiques sur l'Intelligence des Animaux" (3rd letter, p. 231) relates, that some bees which had been taken to South America continued at first to gather honey as usual and to build their cells just as when they were at home; but that when they gradually

Finally I will not omit to observe, that even so early an authority as Plato[1] had attributed desires, ἐπιθυμίας, *i.e. will*, to plants. In my chief work,[2] however, I have entered into the doctrines of the Ancients on this point, and the chapter there which treats of this subject may on the whole serve to complete the present one.

The reluctance and reserve with which we see the authors here quoted make up their minds to acknowledge the will, which nevertheless undoubtedly manifests itself in plants, comes from their being still hampered by the old opinion, that consciousness is a requisite and condition of the will: now it is evident that plants have no consciousness. The thought never entered into the heads of these naturalists, that the will might be the *prius* and therefore independent of the intellect, with which, as the *posterius*, consciousness first makes its appearance. As for knowledge or representation, plants have something merely analogous to it, a mere substitute for it; whereas they really have the will itself quite directly: for, as the thing in itself, it is the substratum of their phenomenal being as well as of every other. Taking a realistic view, starting accordingly from the objective, the matter might even be stated as follows: That which lives and moves in plant-nature and in the animal organism,

---

became aware that plants blossom there all the year round, they left off working. The animal world supplies a fact analogous to the above mentioned change in the mode of multiplying in cereals. This is the abnormal mode of propagation for which the *aphides* have long been noted. The female *aphide*, as is well known, propagates for 10-12 generations without any pairing with the male, and by a variety of the ovoviviparous process. This goes on all summer; but in autumn the males appear, impregnation takes place, and eggs are laid as winter quarters for the whole species, since it is only in this shape that it is able to outlive the winter. (Add. to 3rd ed.)

[1] Plat. "Tim." p. 403. Bip.

[2] "Die Welt a. W. u. V." vol. ii. chap. 23.

when it has gradually enhanced itself in the scale of beings sufficiently for the light of knowledge to fall directly upon it, presents itself in this newly arising consciousness as *will*, and is here more immediately, consequently better, known than anywhere else. This knowledge therefore must supply the key for the comprehension of all that is lower in the scale. For in this knowledge the thing in itself is no longer veiled by any other form than that of the most immediate apprehension. It is this immediate apprehension of one's own volition which has been called the inner sense. In itself the will is without apprehension, and remains so in the inorganic and vegetable kingdoms. Just as the world would remain in darkness, in spite of the sun, if there were no bodies to reflect its light; or as the mere vibration of a string can never become a sound without air or even without some sort of sounding-board: so likewise does the will first become conscious of itself when knowledge is added to it. Knowledge is, as it were, the sounding-board of the will, and consciousness the tone it produces. This becoming conscious of itself on the part of the will, was attributed to a supposed inner sense, because it is the first and most direct knowledge we have. The various emotions of our own will can alone be the object of this inner sense; for the process of representation itself cannot over again be perceived, but, at the very utmost, only be once more brought to consciousness in rational reflection, that second power of representing: that is, *in abstracto*. Therefore also, simple representation (intuition) is to thinking proper—that is, to knowing by means of abstract conceptions—what willing in itself is to becoming aware of that willing, *i.e.* to consciousness. For this reason, a perfectly clear and distinct consciousness, not only of our own existence but also of the existence of others, only arises with the advent of Reason (the faculty for conceptions), which raises Man as far above the brute, perfection.

as the merely intuitive faculty of representation raises the brute above the plant. Now beings which, like plants, have no faculty for representation, are called unconscious, and we conceive this condition as only slightly differing from non-existence; since the only existence such beings have, is in the consciousness of others, as the representation of those others. They are nevertheless not wanting in what is primary in existence, the will, but only in what is secondary; still, what is primary—and this is after all the existence of the thing in itself—appears to us, without that secondary element, to pass over into nullity. We are unable directly and clearly to distinguish unconscious existence from non-existence, although we have our own experience of it in deep sleep.

Bearing in mind, according to the contents of the last chapter, that the faculty of knowing, like every other organ, has only arisen for the purpose of self-preservation, and that it therefore stands in a precise relation, admitting of countless gradations, to the requirements of each animal species; we shall understand that plants, having so very much fewer requirements than animals, no longer need any knowledge at all. On this account precisely, as I have often said, knowledge is the true characteristic which denotes the limits of animality, because of the movement induced by motives which it conditions. Where animal life ceases, there knowledge proper, with whose essence our own experience has made us familiar, disappears; and henceforth analogy is our only way of making that which mediates between the influence of the outer world and the movements of beings intelligible to us. The will, on the other hand, which we have recognised as being the basis and kernel of every existing thing, remains one and the same at all times and in all places. Now, in the lower degree occupied by plant-life and by the vegetative life of animal organisms, it is the *stimulus* which takes the place of knowledge as a means of determining the individual manifestations of this omnipresent will and as a mediator between the outer world and the changes of such a being; finally, in inorganic Nature, it is *physical agency in general;* and when, as here, observation takes place from a higher to a lower degree, both stimulus and physical agency present themselves as substitutes for knowledge, therefore as mere analogues to it. Plants cannot properly be said to perceive light and the sun; yet we see them sensitive in various ways to the presence or absence of both. We see them incline and turn towards the light; and though this movement no doubt generally coincides with their growth, just as the moon's rotation on its axis coincides with its movement round the earth, it nevertheless exists, as well as that of the moon, and the direction of that growth is determined and systematically modified by light, just as an action is determined by a motive, and as the direction of the growth of creeping and clinging plants is determined by the shape and position of the supports they may chance to find. Thus because plants on the whole, still have wants, though not such wants as demand the luxury of a sensorium and an intellect, something analogous has to take the place of these, in order to enable the will to lay hold of, if not to seek out, the satisfactions which offer themselves to it. Now, this analogous substitute is susceptibility for stimuli, and I would express the difference between knowledge and this susceptibility as follows: in knowledge, the motive which presents itself as representation and the act of volition which follows from it, *remain distinctly separate one from the other*, this separation moreover being the more distinct, the greater the perfection of the intellect;—whereas, in mere susceptibility for stimuli, the feeling of the stimulus can no longer be distinguished from the volition it occasions, and they coalesce. In inorganic nature finally, even susceptibility for stimuli, the analogy of which to knowledge is unmistakable, ceases, but the diversity of reaction of each body upon divers kinds of action remains; now, when the matter is considered, as we are doing, in the descending scale, this reaction still presents itself, even here, as a substitute for knowledge. If a body reacts differently, it must have been acted upon differently and that action must have roused a different sensation in it, which with all its dullness has nevertheless a distant analogy to knowledge. Thus when water that is shut up finds an outlet of which it eagerly avails itself, rushing vehemently in that direction, it certainly does not recognise that outlet any more than the acid perceives the alkali approaching it which will induce it to abandon its combination with a metal, or than the strip of paper perceives the amber which attracts it after being rubbed; yet we cannot help admitting that what brings about such sudden changes in all these bodies, bears a certain resemblance to that which takes place within us, when an unexpected motive presents itself. In former times I have availed myself of such considerations as these in order to point out the will in all things; I now employ them to indicate the sphere to which knowledge presents itself as belonging, when considered, not as is usual from the inside, but realistically, from a standpoint outside itself, as if it were something foreign: that is, when we gain the objective point of view for it, which is so extremely important in order to complete the subjective one.[1] We find that knowledge then presents itself as the *mediator of motives, i.e.* of the action of causality upon beings endowed with intellect—in other words, as that which receives the changes from outside upon which those in the inside must follow, as that which acts as mediator between both. Now upon this narrow line hovers *the world as*

---

[1] Compare "Die Welt a. W. u. V." vol. ii. chap. 22: "Objective View of the Intellect."

representation—that is to say, the whole corporeal world, stretched out in Space and Time, which *as such* can never exist anywhere but in the brain any more than dreams, which, as long as they last, exist in the same way. What the intellect does for animals and for man, as the mediator of motives, susceptibility for stimuli does for plants, and susceptibility for every sort of cause for inorganic bodies: and strictly speaking, all this differs merely in degree. For, exclusively as a consequence of this susceptibility to outward impressions having enhanced itself in animals proportionately to their requirements till it has reached the point where a nervous system and a brain become necessary, does consciousness arise as a function of that brain, and in it the objective world, whose forms (Time, Space, Causality) are the way in which that function is performed. Therefore we find the intellect originally laid out entirely with a view to subjectivity, destined merely to serve the purposes of the will, consequently as something quite secondary and subordinate; nay, in a sense, as something which appears only *per accidens*; as a condition of the action of mere motives, instead of stimuli, which has become necessary in the higher degree of animal existence. The image of the world in Space and Time, which thus arises, is only the map[1] on which the motives present themselves as ends. It also conditions the spacial and causal connection in which the objects perceived stand to one another; nevertheless it is only the mediating link between the motive and the act of volition. Now, to take such an image as this of the world, arising in this manner, accidentally, in the intellect, *i.e.* in the cerebral function of animal beings, through the means to their ends being represented and the path of these ephemera on their planet being thus illumined —to take this image, we say, this mere cerebral phenomenon, for the true, ultimate essence of things (thing in itself),

---

[1] *Plan.*

[illegible]

to take the concatenation of its parts for the absolute order of the Universe (relations between things in themselves), and to assume all this to exist even independently of the brain, would indeed be a leap! Here in fact, an assumption such as this must appear to us as the height of rashness and presumption; yet it is the foundation upon which all the systems of pre-Kantian *dogmatism* have been built up; for it is tacitly pre-supposed in all their Ontology, Cosmology and Theology, as well as in the *æternæ veritates* to which they appeal. But that leap had always been made tacitly and unconsciously, and it is precisely Kant's immortal achievement, to have brought it to our consciousness.]

By our present realistic way of considering the matter therefore, we unexpectedly gain the *objective stand-point* for Kant's great discoveries; and, by the road of empirico-physiological contemplation, we arrive at the point whence his transcendental-critical view starts. For Kant's view takes the subjective for its standpoint and considers consciousness as given. But from consciousness itself and its law and order, given *à priori*, that view arrives at the conclusion, that all which appears in that consciousness can be nothing more than mere phenomenon. From our realistic, exterior standpoint, on the contrary, which assumes the *objective*—all that exists in Nature—to be absolutely given, we see what the intellect is, as to its aim and origin, and to which class of phenomena it belongs, and we recognise (so far *à priori*) that it *must* be limited to mere phenomena. We see too, that what presents itself in the intellect can at all times only be conditioned—chiefly *subjectively*—that is, can, together with the order of the nexus of its parts, only be a *mundus phenomenon*, which is likewise subjectively conditioned; but that it can never be a knowledge of things as they may be in themselves, or as they may be connected in themselves. For, in the nexus of Nature, we have found the faculty of knowing as a conditioned faculty, It is only in conscious intellection that the opposites appear, namely the separation between empirical & subjective view etc. etc. —

whose assertions, precisely on that account, cannot claim unconditioned validity. To anyone who has studied and understood the Critique of Pure Reason—to which our standpoint is essentially foreign—it must nevertheless still appear as if Nature had intended the intellect for a puzzle-glass to mislead us and were playing at hide-and-seek with us. But by our realistic objective road, *i.e.* by starting from the objective world as given, we have now come to the very same result at which Kant had arrived by the idealistic, subjective road, *i.e.* by examining the intellect itself and the way in which it constitutes consciousness. We now see that the world as representation hovers on the narrow line between the external cause (motive) and the effect evoked (act of the will), in beings having knowledge (animals), in which beings for the first time there occurs a distinct separation between motive and voluntary act. *Ita res accendent lumina rebus.* It is only when it is reached by two quite opposite roads, that the great result attained by Kant is distinctly seen; and when light is thus thrown upon it from both sides, his whole meaning becomes clear. Our objective standpoint is realistic and therefore conditioned, so far as, in taking for granted the existence of beings in Nature, it abstracts from the fact that their objective existence postulates an intellect, which contains them as its representation; but Kant's subjective and idealistic standpoint is likewise conditioned, inasmuch as he starts from the intelligence, which itself, however, presupposes Nature, in consequence of whose development as far as animal life that intelligence is for the first time enabled to make its appearance.—Keeping steadily to this realistic, objective standpoint of ours, we may also define Kant's theory as follows: After Locke, in order to know things in themselves, had abstracted the share of sensuous functions—called by him secondary qualities—from things as they appear, Kant with infinitely greater depth deducted from them the incomparably larger share of the cerebral function, which includes precisely what Locke calls primary qualities. But all I have done here has been to show why all this must necessarily be as it is, by indicating the place occupied by the intellect in the nexus of Nature, when we start realistically from the objective as given, but, in doing so, take the only thing of which we are quite directly conscious, the *will*—that true *ποῦ στῶ* of Metaphysics—for our support, as being what is primarily real, everything else being merely its phenomenon. What now follows serves to complete this.

I have mentioned already, that where knowledge takes place, the motive which appears as representation and the act of volition resulting from it, remain *the more clearly separated one from the other,* the more perfect the intellect; that is, the higher we ascend in the scale of beings. This calls for fuller explanation. As long as the will's activity is roused by stimuli alone, and no representation as yet takes place—that is, in plants—there is no separation at all between the receiving of impressions and the being determined by them. In the lowest order of animal intelligence, such as we find it in *radiaria, acalepha, acephala,* &c., the difference is still small; a feeling of hunger, a watchfulness roused by this, an apprehending and snapping at their prey, still constitute the whole content of their consciousness; nevertheless this is the first twilight of the dawning world as representation, the background of which—that is to say, everything excepting the motive which acts each time—still remains shrouded in impenetrable darkness. Here moreover the organs of the senses are correspondingly imperfect and incomplete, having exceedingly few data for perception to bring to an understanding yet in embryo. Nevertheless wherever there is sensibility, it is always accompanied by understanding, *i.e.* with the faculty for referring effects experienced to external causes; without this, sensibility would be superfluous and a mere source of aimless suffering. The higher we ascend in the scale of animals, the greater number and perfection of the senses we find, till at last we have all five; these are found in a small number of invertebrate animals, but they only become universal in the *vertebrata.* The brain and its function, the understanding, develop proportionately, and the object now gradually presents itself more and more distinctly and completely and even already in connection with other objects; because the service of the will requires apprehension of the mutual relations of objects. By this the world of representation acquires some extent and background. Still that apprehension never goes beyond what is required for the will's service: the apprehending and the being roused to reaction by what is apprehended, are not clearly held asunder: the object is only perceived in as much as it is a motive. Even the more sagacious animals only see in objects what concerns themselves, what has reference to their will or, at the utmost, what may have reference to it in future: of this last we have an instance in cats, who take pains to acquire an accurate knowledge of localities, and in foxes, who endeavour to find hiding-places for their future prey. But they are insensible towards everything else; no animal has perhaps ever yet seen the starry sky: my dog started in terror when for the first time he accidentally caught sight of the sun. A first faint sign of a disinterested perception of their surroundings may at times be observed in the most intelligent animals, especially when they have been trained by taming. Dogs go so far as to stare at things; we may often see them sit down at the window and attentively watch all that passes. Monkeys look about them at times, as if trying to make up their mind about their surroundings. It is in Man that the separation between motive and action, between representation and will, first becomes quite distinct. But this does not immediately put an end to the subservience of the intellect to the will. Ordinary human beings after all only comprehend quite clearly that which, in some way or other, refers directly or indirectly to their own selves (has an interest for them); with respect to everything else, their understanding continues to be unconquerably inert; the rest therefore remains in the back-ground and does not come into consciousness under the radiant light of complete distinctnees. Philosophical astonishment and artistic emotion occasioned by the contemplation of phenomena, remain eternally foreign to them, whatever they may do; for at the bottom, everything appears to them to be a matter of course. Complete liberation and separation of the intellect from the will and its bondage is the prerogative of genius, as I have fully shown in the æsthetic part of my chief work. Genius is objectivity. The pure objectivity and distinctness with which things present themselves in [intuitive] perception—that fundamental and most substantial source of knowledge—actually stands every moment in inverse proportion to the interest which the will has in those things; and knowing without willing is the condition, not to say the essence, of all gifts of æsthetic intelligence. Why does an ordinary artist produce so bad a painting of yonder landscape, notwithstanding all the pains he has taken? Because he sees it so. And why does he see so little beauty in it? Because his intellect has not freed itself sufficiently from his will. The degrees of this separation give rise to great intellectual distinctions between men; for the more knowledge has freed itself from the will, the purer, consequently the more objective and correct, it is; just as that fruit is best, which has no after-taste of the soil on which it has grown.

This relation, as important as it is interesting, deserves surely to be made still clearer by a retrospective view of the whole scale of beings, and by recalling the gradual transition from absolute subjectivity to the highest degrees of objectivity in the intellect. Inorganic Nature namely, is absolutely subjective, no trace whatever of consciousness of an outer world being found in it. Stones, boulders, ice-blocks, even when they fall upon one another, or knock or rub against one another, have no consciousness of each other and of an outer world. Still even these are susceptible to external influence, which causes their position and movement to change and may therefore be considered as a first step towards consciousness. Now, although plants also have no consciousness of the outer world, and although the mere analogue of a consciousness which exists in them must, on the contrary, be conceived as a dull self-enjoyment; yet we see that they all seek light, and that many of them turn their flowers or leaves daily towards the sun, while creepers find their way to supports with which they are not in contact; and finally we see individual kinds of plants show even a sort of irritability. Unquestionably therefore, there is a connection and relation between their movements and surroundings, even those with which they are not in immediate contact; and this connection we must accordingly recognise as a faint analogue to perception. With animal life first appears decided perception—that is, consciousness of other things, as opposed to that clear consciousness of ourselves to which that consciousness of other things first gives rise. This constitutes precisely the true character of animal-nature, as opposed to plant-nature. In the lowest animals, consciousness of the outer world is very limited and dim: each increasing degree of understanding extends it and makes it clearer, and this gradual increase of the understanding again adapts itself to the gradually increasing requirements of the animal, and thus the process continues through the whole long ascending scale of the animal series up to Man, in whom consciousness of the outer world reaches its acme, and in whom the world accordingly presents itself more distinctly and completely than in any other being. Still, even here, there are innummerable degrees in the clearness of consciousness, from the dullest blockhead to genius. Even in normal heads there still remains a considerable tinge of subjectivity in their objective perception of external objects, knowledge still bearing throughout the character of existing merely for the ends of the will. The more eminent the head, the less prominent is this character, and the more purely objective does the representation of the outer world become; till in genius finally it attains completely objectivity, by which the Platonic ideas detach themselves from the individual things, because the mind which comprehends them enhances itself to the pure subject of knowledge. Now, as perception is the basis of all knowledge, all thinking and all insight must be influenced by this fundamental difference in the quality of it, from which arises that complete difference between the ordinary and the superior mind in their whole way of viewing things, which may be noticed on all occasions. From this also proceeds the dull gravity, nearly resembling that of animals, which characterizes common-place heads whose knowledge is acquired solely for the benefit of the will, as opposed to the constant play of exuberant intellect which brightens the consciousness of the superior mind. The consideration of the two extremes in the great scale which we have here exhibited, seems to have given rise to the German hyperbolical expression "*Block*" (*Klotz*), as applied to human beings, and to the English "blockhead."

But another different consequence of the clear separation of the will from the intellect—therefore of the motive from the action,—which first appears in the human race, is the deceptive illusion of freedom in our individual actions. Where, as in inorganic nature, causes, or, as in the vegetable kingdom, stimuli, call forth the effect, the causal connection is so simple, that there is not even the slightest semblance of freedom. But already in animal life, where that which till then had manifested itself as cause or as stimulus, now appears as a *motive*—and a new world, that of representation, consequently presents itself, and cause and effect lie in different spheres—the causal connection between both, and with it the necessity, are less evident than they were in plants and in inorganic Nature. Nevertheless they are still unmistakable in animals, whose merely intuitive representation stands midway between organic functions induced by stimuli and the deliberate acts of Man. The animal's actions infallibly follow as soon as the perceptible motive is present, unless counteracted by some equally perceptible counter-motive or by training; yet here representation is already distinct from the act of volition and comes separately into consciousness. But in Man—whose representation has enhanced itself even to abstract conception and who now derives motives and counter-motives for his actions from a whole invisible thought-world which he carries about with him in his brain and which makes him independent of presence and of perceptible surroundings—this connection no longer exists at all for observation from outside, and even for inward observation it is only knowable through abstract and mature reflection. For these abstract motives, when observed from outside, give an impress of deliberation to all his movements, by which they acquire a semblance of independence that manifestly distinguishes them from those of animals, yet which after all only bears evidence to the fact, that Man is actuated by a class of representations in which animals do not share. Then again, in self-consciousness, the act of volition is known to us in the most immediate way, but the motive in most cases very indirectly, being often even intentionally veiled, out of consideration for our self-knowledge. This process therefore, in coincidence with the consciousness of that true freedom which belongs to the will, as thing in itself outside phenomenon, produces the deceptive illusion that even the single act of volition is unconditioned and free: that is, without a reason; whereas, when the character is given and the motive recognised, every act of volition really follows with the same strict necessity as the changes of which mechanics teach us the laws, and, to use Kant's words, were character and motive exactly known, might be calculated with precisely the same certainty as an eclipse of the moon; or again, to place a very heterogeneous authority by the side of Kant, as Dante says, who is older than Buridan:—

> "Intra duo cibi distanti e moventi
> D'un modo, prima si morria di fame
> Che liber' uomo l'un recasse a' denti."
>
> *Paradiso*, iv. 1.[1]

---

[1] Between two kinds of food, both equally
Remote and tempting, first a man might die
Of hunger, ere he one could freely chuse. (*Cary's Tr.*)

PHYSICAL ASTRONOMY.

NO part of my doctrine could I have less hoped to see corroborated by empirical science than that, in which the fundamental truth, that Kant's thing in itself (*Ding an sich*) is the Will, is applied by me even to inorganic Nature, and in which I show the active principle in all fundamental forces of Nature to be absolutely identical with what is known to us within ourselves as the Will.—It has therefore been particularly gratifying to me to have found that an eminent empiricist, yielding to the force of truth, had gone so far as to express this paradox in the exposition of his scientific doctrine. I allude to Sir John Herschel and to his "Treatise on Astronomy," the first edition of which appeared in 1833, and a second enlarged one in 1849, under the title "Outlines of Astronomy." Herschel,—who, as an astronomer, was acquainted with gravity, not only in the one-sided and really coarse part which it acts on earth, but also in the nobler one performed by it in universal Space, where the celestial bodies play with each other, betray mutual inclination, exchange as it were amorous glances, yet never allow themselves to come into rude contact, and thus continue dancing their dignified minuet to the music of the spheres, while they keep at a respectful distance from one another—when he comes to the statement of the law of gravitation in the seventh chapter,[1] expresses himself as follows:—

---

[1] Herschel, "Treatise on Astronomy," chap. 7, § 371 of the 1st edition, 1833.

"All bodies with which we are acquainted, when raised into the air and quietly abandoned, descend to the earth's surface in lines perpendicular to it. They are therefore urged thereto by a force or effort, the direct or indirect result of a consciousness and a will existing somewhere, though beyond our power to trace, which force we term *gravity*."[1]

The writer who reviewed Herschel's book in the October number of the "Edinburgh Review" of 1833, anxious, as a true Englishman, before all things to prevent the Mosaic record[2] from being imperilled, takes great umbrage at this passage, rightly observing that it cannot refer to the will of God Almighty, who has called Matter and all its properties into being; he utterly refuses to recognise the validity of the proposition itself, and denies that it follows consistently from the preceding § upon which Herschel wishes to found it. My opinion is, that it undoubtedly would logically follow from that § (because the contents of a conception are determined by its origin), but that the antecedent itself is false. It asserts namely, that the origin of the conception of causality is experience, more especially such experience as we ourselves make in acting by means of our own efforts upon bodies belonging to the outer world. It is only in countries like England, where the light of Kantian philosophy has not yet begun to dawn, that the conception of causality can be thought of as originating in experience (professors of philosophy who pooh-pooh Kant's doctrines and think me beneath their notice being left out of the question); least of all can it be thought of by those who are acquainted with my proof of the *à priority* of that conception, which differs completely from Kant's proof and rests upon the fact, that knowledge of causality must necessarily precede all perception of the outer world itself as its condition; since perception is only brought about through the *transition*—effected by the understanding—from the sensation in the organ of sense to its *cause*, which cause now presents itself as an *object* in Space, itself likewise an *à priori* intuition. Now, as the perception of objects must be anterior to our conscious action upon them, the experience of that conscious action cannot be the origin of the conception of causality; for, before I can act upon things, they must first have acted upon me as motives. I have entered fully into all that has to do with this in my chief work,[1] and in the second edition of my treatise on the Principle of Sufficient Reason, § 21,[2] where the assumption adopted by Herschel finds special refutation; it is therefore useless to enter into it once more here. But it would be even quite possible to refute this assumption empirically, since it would necessarily follow from it, that a man who came into the world without arms or legs, could never attain any knowledge of causality or perception of the outer world. Now Nature has effectually disproved this by a case, of which I have reproduced the account from its original source in the above-mentioned chapter of my chief work, p. 40.[1]—In this assertion of Herschel's therefore, we have another instance of a right conclusion drawn from wrong premisses. Now this always happens when we have obtained immediate insight into a truth by a right *aperçu*, but are at a loss to find out and clearly define our reasons for knowing it, owing to our inability to bring them to clear consciousness. For, in all original insight, conviction exists before proof: the proof being invariably excogitated afterwards.

---

[1] Even Copernicus had said the same thing long before: "*Equidem existimo Gravitatem non aliud esse quam* appetentiam quandam *naturalem, partibus inditam a divina providentia opificis universorum, ut in unitatem integritatemque suam se conferant, in formam Globi coeuntes. Quam affectionem credibile est etiam Soli, Lunae caeterisque errantium fulgoribus, inesse, ut ejus efficacia, in ea qua se repraesentant rotunditate permaneant; quae nihilominus multis modis suos efficiunt circuitus*" ("Nicol. Copernici revol." Lib. I, Cap. IX.—Compare "Exposition des Découvertes de M. le Chevalier Newton par M. Maclaurin; traduit de l'Anglois par M. Lavirotte," Paris, 1749, p. 45). Herschel evidently saw, that if we hesitate to explain gravity, as Descartes did, by an impulse from outside, we are absolutely driven to admit a will inherent in bodies. *Non datur tertium.* [Add. to 3rd ed.]

[2] Which he has more at heart than all the wisdom and truth in the world. [Add. to 3rd ed.]

---

[1] See "Die Welt a. W. u. V." vol. ii. ch. 4, pp. 38-42 (3rd edition, pp. 41-46).

[2] P. 74 (3rd edition, p. 79), p. 92 of the translation in the present volume

The immediate manifestation of gravity is more evident in each part of liquid, than of solid, matter, owing to the perfect freedom of motion of the parts among each other. In order therefore to penetrate into this *aperçu*, which is the true source of Herschel's assertion, let us look attentively at a torrent dashing headlong over rocks and ask ourselves whether so determined an impetus, so boisterous a vehemence, can arise without an exertion of strength, and whether an exertion of strength is conceivable without will. And so it is precisely in every case in which we become aware of anything moving spontaneously, of any primary, uncommunicated force: we are constrained to think its innermost essence as will.—This much at any rate is certain, that Herschel, like all the empiricists in so many different branches of science whose evidence I have quoted above, had arrived here at the limit where nothing more is left behind the Physical but the Metaphysical; that this had brought him to a standstill, and that he, as well as the rest of them, was unable to find anything beyond that limit, but the *will.*

Herschel moreover, like most of these empiricists, is here still hampered by the opinion that will is inseparable from conciousness. As I have expatiated enough above upon this fallacy, and its correction through my doctrine, it is needless for me to enter into it here again.

---

[1] 3rd edition, p. 44.

The attempt has repeatedly been made, since the beginning of this century, to ascribe *vitality* to the inorganic world. Quite wrongly: for living and inorganic are convertible conceptions, and with death the organic ceases to be organic. But no limit in the whole of Nature is so sharply drawn as the line which separates the organic from the inorganic: that is to say, the line between the region in which Form is the essential and permanent, Matter the accidental and changing,—and the region in which this relation is entirely reversed. This is no vacillating boundary like that perhaps between animals and plants, between solid and liquid, between gas and steam: to endeavour to destroy it therefore, is intentionally to bring confusion into our ideas. On the other hand, I am the first who has asserted that a *will* must be attributed to all that is lifeless and inorganic. For, with me, the will is not, as has hitherto been assumed, an accident of cognition and therefore of life; but life itself is manifestation of will. Knowledge, on the contrary, is really an accident of life, and life of Matter. But Matter itself is only the perceptibility of the phenomena of the will. Therefore we are compelled to recognise *volition* in every effort or tendency which proceeds from the nature of a material body, and properly speaking constitutes that nature, or manifests itself as phenomenon by means of that nature; and there can consequently be no Matter without manifestation of will. The lowest and on that account most universal manifestation of will is *gravity*, wherefore it has been called a primary and essential property of Matter.

The usual view of Nature assumes *two* fundamentally different principles of motion, therefore it supposes that the movement of a body may have *two different origins*: *i.e.*, that it proceeds either from the inside, in which case it is attributed to the *will*; or from the outside, and then it is occasioned by *causes*. This principle is gene-

self-moving
thing.

rally taken for granted as a matter of course and only occasionally brought explicitly into prominence; nevertheless, in order to make the case quite certain, I will point out a few passages from the earliest to the latest authors in which it is specially stated. In Phædrus,[1] Plato makes the distinction between that which moves spontaneously from inside (*soul*) and that which receives movement only from outside (*body*)—*τὸ ὑφ' ἑαυτοῦ κινούμενον καὶ τό, ᾧ ἔξωθεν τὸ κινεῖσθαι.*[2]—Aristotle establishes the principle in precisely the same way: *ἅπαν τὸ φερόμενον ἢ ὑφ' ἑαυτοῦ κινεῖται, ἢ ὑπ' ἄλλου* (*quidquid fertur a se movetur, aut ab alio*).[3] He returns to the subject in the next Book, chap. 4 and 5, and connects it with some explanatory details which lead him into considerable perplexity, on account precisely of the fallacy of the antithesis.[4]—In more recent times again J. J. Rousseau brings forward the same antithesis with great *naïveté* and candour in his famous "Profession de foi du vicaire Savoyard:"[5] "*J'aperçois dans les corps deux sortes de mouvement, savoir: mouvement communiqué et mouvement spontané ou volontaire: dans le premier la cause motrice est étrangère au corps mû; et dans le second elle est en lui-même.*"—But even in our time and in the stilted, puffed-up style which is peculiar to it, Burdach holds forth as follows:[6] "The cause that determines a movement lies either inside or outside of that which

---

[1] Plato, "Phæd." p. 319 Bip.

[2] "That which is moved by itself and that which is moved from outside." [Tr.] And we find the same distinction again in the 10th Book "De Legibus," p. 85. [After him Cicero repeats it in the two last chapters of his "Somnium Scipionis." Add. to 3rd ed.]

[3] "All that is moved, is moved either by itself or by something else." [Tr.] Aristotle, "Phys." vii. 2.

[4] Maclaurin, too, in his account of Newton's discoveries, p. 102, lays down this principle as his starting-point. [Add. to 3rd ed.]

[5] Émile, iv. p. 27. Bip.

[6] Burdach, "Physiologie," vol. iv. p. 323.

Maclaurin
statement of

moves. Matter is external existence; it has powers of motion, but it only brings them into play under certain spacial conditions and external oppositions: the soul alone is an ever active and internal thing, and only those bodies which have souls find within themselves inducement to move, and move of their own free will, independently of outer mechanical circumstances."

Now here however I must say, as Abélard once did: *si omnes patres sic, at ego non sic:* for, in opposition to this principle, however great may be its antiquity and universality, my doctrine maintains, that there are *not* two origins of movement differing fundamentally from one another; that movement does *not* proceed either from inside, when it is ascribed to the will, or from outside, when it is brought about by causes; but that both things are inseparable and take place simultaneously with every movement made by a body. For movement which is admitted to arise from the *will*, always presupposes a *cause* also: this cause, in beings that have knowledge, is a *motive;* but without it, even in these beings, movement is impossible. On the other hand, the movement of a body which is admitted to have been brought about by an outward *cause*, is nevertheless in itself a manifestation of the *will* of that body which has only been evoked by that cause. Accordingly there is only one, uniform, universal and exceptionless principle of all movement, whose inner condition is *will* and whose outer occasion is *cause*, which latter may also take the form of a *stimulus* or of a *motive*, according to the nature of the thing moved.

[illegible]
Aristotle
the
Stoics

All that is known to us of things in a merely empirical or *à posteriori* way, is in itself *will;* whereas, so far as they can be determined *à priori*, things belong exclusively to *representation*, to mere phenomenon. Natural phenomena therefore become proportionately less easy to comprehend, the more distinctly the will manifests itself in them, *i.e.* the higher they stand on the scale of beings; whereas, they become more and more comprehensible the smaller the amount of their empirical content, because they remain more and more within the sphere of mere representation, the forms of which, known to us *à priori*, are the principle of comprehensibility. Accordingly, it is only so long as we limit ourselves to this sphere—that is to say, only when we have before us mere representation, mere form without empirical content—that our comprehension is complete and thorough: that is, in the *à priori* sciences, Arithmetic, Geometry, Phoronomy and Logic. Here everything is in the highest degree comprehensible; our insight is quite clear and satisfactory: it leaves nothing to be desired, since we are even unable to conceive that anything could be otherwise than it is. This comes from our having here exclusively to do with the forms of our own intellect. Thus the more we are able to comprehend in a relation, the more it consists of mere phenomenon and the less it has to do with the thing in itself. Applied Mathematics, Mechanics, Hydraulics, &c. &c., deal with the lowest degrees of objectification of the will, in which the largest part still remains within the sphere of mere representation; nevertheless even here there is already an empirical element which stands in the way of entire comprehension, which makes the transparency less complete, and in which the inexplicable shows itself. For the same reason, only few departments of Physics and of Chemistry continue to admit of a mathematical treatment; whereas higher up in the scale of beings this has to be entirely done away with, precisely because of the preponderance of content over form in these phenomena. This content is will, the *à posteriori*, the thing in itself, the free, the causeless. Under the heading "Physiology of Plants," I have shown how—in beings that live and have knowledge—motive and act of will, representation and volition, separate and detach themselves more and more distinctly one from the other, the higher we ascend in the scale of beings. Now, in inorganic Nature also, the cause separates itself from the effect in just the same proportion, and the purely empirical—which is precisely phenomenon of the will—detaches itself more and more prominently; but, just with this, comprehensibility diminishes. This point merits fuller investigation, and I request my readers to give their whole and undivided attention to what I am about to say, as it is calculated to place the leading thought of my doctrine in the strongest possible light, both as to comprehensibility and cogency. But this is all I can do; for it is beyond my power to induce my contemporaries to prefer thoughts to verbiage; I can only console myself for not being the man of the age.

On the lowest step of the scale of Nature, cause and effect are quite homogeneous and quite equivalent. Here therefore we have perfect comprehension of the causal connection: for instance, the cause of the movement of one ball propelled by impact, is the movement of another, which loses just as much movement as the first one receives. Here causality is in the highest degree intelligible. What notwithstanding still remains mysterious, is restricted to the possibility of the passage of movement—of a thing incorporeal—from one body to another. The receptivity of bodies in this mode is so slight, that the effect to be produced has to pass over completely from its cause. The same holds good of all purely mechanical influences; and if they are not all just as instantaneously understood, it is either because they are hidden from us by accessory circumstances, or because we are confused by the complicated connection of many causes and effects. In itself, mechanical causality is everywhere equally, that is, in the highest degree, comprehensible; because cause and effect do not differ here as to *quality*, and because where they differ as to *quantity*, as in the lever, mere Space and Time relations suffice to make the thing clear. But as soon as weights come also into play, a second mysterious element supervenes, *gravity:* and, where elastic bodies are concerned, *elasticity* also.—Things change as soon as we begin to ascend in the scale of phenomena. Heat, considered as cause, and expansion, liquefaction, volatilization or crystallization, as effects, are not homogeneous; therefore their causal connection is not intelligible. The comprehensibility of causality has diminished: what a lower degree of heat caused to liquefy, a higher degree makes evaporate: that which crystallizes with less heat, melts when the heat is augmented. Warmth softens wax and hardens clay; light whitens wax and blackens chloride of silver. And, to go still further, when two salts are seen to decompose each other mutually and to form two new ones, elective affinity presents itself to us as an impenetrable mystery, and the properties of the two new bodies are not a combination of the properties of their separate elements. Nevertheless we are still able to follow the process and to indicate the elements out of which the new bodies are formed; we can even separate what has been united and restore the original quantities. Thus noticeable heterogeneousness and incommensurability between cause and effect have here made their appearance: causality has become more mysterious. And this becomes still more apparent when we compare the effects of electricity or of the Voltaic pile with their causes, *i.e.* with the friction of glass, or the piling and oxidation of the plates. Here all similarity between cause and effect at once vanishes; causality becomes shrouded in a thick veil, which men like Davy, Faraday and Ampère have strenuously endeavoured to lift. The only thing now discernible through that veil, are the laws ruling its mode of action, which may be brought into a schema such as $+E-E$, communication, distribution, shock, ignition, analysis, charging, isolation, discharging, electric current, &c. &c., to this schema we are able to reduce and even to direct the effect; but of the process itself we know nothing: that remains an x. Here therefore cause and effect are completely heterogeneous, their connection is unintelligible, and we see bodies show great susceptibity to causal influences, the nature of which remains a secret for us. Moreover in proportion as we mount higher in the scale, the effect seems to contain more, the cause less. When we reach organic Nature therefore, in which the phenomenon of life presents itself, this is the case in a far higher degree still. If, as is done in China, we fill a pit with decaying wood, cover it with leaves from the same tree as the wood, and pour a solution of sulphur repeatedly over it, an abundant crop of edible mushrooms will spring up. A world of rapidly moving *infusoria* will arise from a little hay well watered. What a difference lies here between effect and cause! How much more does the former seem to contain than the latter! When we compare the seed, sometimes centuries, nay even thousands of years old, with the tree, or the soil with the specifically and strikingly different juices of innumerable plants—some healthy, some poisonous, some again nutritious—which spring from the same earth, upon which the same sun shines and the same rain falls, all resemblance ceases, and with it all comprehensibility for us. For here causality already appears in increased potency: that is, as stimulus and as susceptibility for stimulus. The schema of cause and effect alone has remained; we know that this is cause, that effect; but we know nothing whatever of the nature and disposition of causality. Between cause and effect there is not only no qualitative resemblance, but no quantitative relation: the relatively greater importance of the effect as compared with its cause increases more and more; the effect of the stimulus too does not augment in proportion with the enhancement of that stimulus; in fact just the contrary often takes place. Finally, when we come to the sphere of beings which have knowledge, there is no longer any sort of resemblance or relation between the action performed and the object which, as representation, evokes it. Animals, however, as they are restricted to *perceptible* representations, still need the *presence* of the object acting as a motive, which action is then immediate and infallible (if we leave training, *i.e.* habit enforced by fear, out of the question). For animals are unable to carry about with them conceptions that might render them independent of present impressions, enable them to reflect, and qualify them for deliberate action. Man can do this. Therefore when at last we come to rational beings, the motive is even no longer a present, perceptible, actually existing, real thing, but a mere conception having its present existence only in the brain of the person who acts, but which is extracted from many multifarious perceptions, from the experience of former years, or has been handed down in words. Here the separation between cause and effect is so wide, the effect has grown so much stronger as compared with the cause, that the vulgar mind no longer perceives the existence of a cause at all, and the acts of the will appear to it to be unconditioned, causeless: that is to say, free. This is just why, when we reflect upon them from outside, the movements of our own body present themselves as if they took place without cause, or to speak more properly, by a miracle. Experience and reflection alone teach us that these movements, like all others, are only possible as the effects of causes, here called motives, and that, on this ascending scale, it is only as to material reality that the cause has failed to keep pace with the effect; whereas it has kept pace with it as to dynamical reality, energy.—At this degree of the scale therefore—the highest in Nature—

[illegible] the agency & cause of the [illegible] will.

causality has become less intelligible to us than ever. Nothing but the bare schema, taken in a quite general sense, now remains, and the ripest reflection is needed to recognise its applicability and the necessity that schema brings with it everywhere.

In the Grotto of Pausilippo, darkness continues to augment as we advance towards the interior; but when once we have passed the middle, day-light again appears at the other end and shows us the way; so also in this case: just at the point where the outwardly directed light of the understanding with its form of causality, gradually yielding to increasing darkness, had been reduced to a feeble, flickering glimmer, behold! we are met by a totally different light proceeding from quite another quarter, from our own inner self, through the chance circumstance, that we, the judges, happen here to be the very objects that are to be judged. The growing difficulty of the comprehension of the causal nexus, at first so clear, had now become so great for perception and for the understanding—the agent in it—that, in animal actions, the very existence of that nexus seemed almost doubtful and those actions appeared to be a sort of miracle. But, just at this point, the observer receives from his own inner self the direct information that the agent in them is the will—that very will, which he knows better and more intimately than anything that external perception can ever supply. This knowledge alone must be the philosopher's key to an insight into the heart of all those processes in unconscious Nature, concerning which causal explanation—although, here, to be sure, more satisfactory than in the processes last considered, and the clearer, the farther those processes were removed from these—nevertheless had still left an unknown x, and could never quite illumine the inside of the process, even in a body propelled by impact or attracted by gravity. This x had continued expanding till finally, on the highest degrees of the scale, it had wholly repelled causal explanation. But then, just when the power of causal explanation had been reduced to a minimum, that *x* revealed itself as *the will*—reminding us of Mephistopheles when, yielding to Faust's learned exorcisms, he steps forth out of the huge grown poodle whose kernel he was. In consequence of the considerations I have here set forth at length, we can surely hardly avoid recognising *the identity of this x*, even on the lowest degrees of the scale, where it was but faintly perceptible; then higher up, where it extended its obscurity more and more; and finally on the highest degrees, where it cast a shadow upon all things—till, at the very top, it reveals itself to our consciousness in our own phenomenal being, as *the will*. The two primarily different sources of our knowledge, that is to say the inward and the outward source, have to be connected together at this point by reflection. It is quite exclusively out of this connection that our comprehension of Nature, and of our own selves arises; but then the inner side of Nature is disclosed to our intellect, which by itself alone can never reach further than to the mere outside; and the mystery which philosophy has so long tried to solve, lies open before us. For then indeed we clearly see what the Real and the Ideal (the thing in itself and the phenomenon) properly are; and this settles the principal question which has engaged the attention of philosophers since Descartes: that is to say, the question as to the relation between these two, whose complete diversity Kant had shown most thoroughly and with unexampled depth, yet whose absolute identity was immediately afterwards proclaimed by humbugs on the credit of intellectual intuition. But if we decline to avail ourselves of this insight, which is really the one strait gate to truth, we can never acquire comprehension of the intrinsic essence of Nature, to which absolutely no other road leads;

for then indeed we fall into an irremovable error. Then, as I have already said, we maintain the view, that motion has two radically different primary principles with a solid partition-wall between them: *i.e.* movement by means of causes, and movement by means of the will. The first of these must then remain for ever incomprehensible as to its innermost essence, because, after all its explanations, there is still left that unknown x which contains the more, the higher the object under consideration stands in the scale of beings; while the second, movement by the will, presents itself as entirely disconnected from the principle of causality; as without reason; as freedom in individual actions: in other words, as completely opposed to Nature and utterly unexplainable. On the other hand, if the above-mentioned union of our external and internal knowledge has once been accomplished at the point where both meet, we then recognise two identities in spite of all accidental differences. That is to say, we recognise the identity of causality with itself on every degree of the scale of beings, and the identity of the x, which at first was unknown (*i.e.* of physical forces and vital phenomena), with the will which is within us. We recognise, I say, firstly the essential identity of causality under the various forms it is forced to assume on the different degrees of the scale, as it may manifest itself, now as a mechanical, chemical, or physical cause, now as a stimulus, and again as a perceptible or an abstract motive: we know it to be one and the same, not only when a propelling body loses as much movement as it imparts by impact, but also when in the combats of thought against thought, the victorious one, as the more powerful motive, sets Man in motion, a motion which follows with no less necessity than that of the ball which is struck. Where we ourselves are the things set in motion, where therefore the kernel of the process is well and intimately known to us, instead of allowing ourselves to be dazzled and confused by this light and thereby losing sight of the causal connection as it lies before us everywhere else in the whole of Nature; instead of shutting out this insight for ever, we now apply the new knowledge we have acquired from within as a key to the knowledge of things outside us, and then we recognise the second identity, that of our will with the hitherto mysterious x that remains over after all causal explanation as an insoluble residue. Consequently we then say: even in cases in which the effect is brought about by the most palpable cause, the mysterious x in the process, the real innermost core of it, the true agent, the *in-itself* of all phenomena—which, after all, is only given us as representation and according to the forms and laws of representation—is essentially one and the same with what is known to us immediately and intimately as *the will* in the actions of our own body, which body is likewise given us as intuition and representation.—This is (say what you will) the basis of true philosophy, and if the present age does not see this, many following ages will. *Tempo è galant' uomo!* (*se nessun altro*).—Thus, just as, on the one hand, the essence of causality, which appears most clearly only on the lowest degree of the objectification of the will, is recognised by us again at every ascending step, even at the highest; so also, on the other hand, is the essence of the will recognised by us at every descending step in that ladder, even at the lowest, although this knowledge is only immediately acquired at the very highest. The old error asserts, that where there is will, there is no causality; and that where there is causality, there is no will. But we say: everywhere where there is causality, there is will; and no will acts without causality. The *punctum controversiæ* therefore, is, whether will and causality can and must subsist together in one and the same process at the same time. What makes the knowledge, that this is indeed the case, so difficult, is the circumstance, that we know causality and will in two fundamentally different ways: causality entirely from outside, quite indirectly, quite through the understanding; will entirely from inside, quite directly; and that accordingly the clearer the knowledge of the one in each given instance, the less clear is the knowledge of the other. Therefore we recognise the essence of the will least readily, where causality is most intelligible; and, where the will is most unmistakably evident, causality becomes so obscured, that the vulgar mind could venture to deny its existence altogether.—Now, as Kant has taught us, causality is nothing but the form of the understanding itself, knowable *à priori*: that is, the essence of *representation*, as such, which is one side of the world; the other side is *will*: which is the thing in itself. That relative increase and decrease of clearness in inverse proportion of causality and of the will, that mutual advancing and receding of both, depends consequently upon the fact, that the more a thing is given us as mere phenomenon, *i.e.* as representation, the more clearly does the *à priori* form of representation, *i.e.* causality, manifest itself: this is the case in inanimate Nature; conversely, the more immediate our knowledge of the will, the more does the form of representation recede into the background: this is the case with ourselves. That is: the nearer one side of the world approaches to us, the more do we lose sight of the other.

LINGUISTIC.

ALL that I have to record under this head is an observation of my own, made within the last few years, which seems hitherto to have escaped notice. Yet, that it is worthy of consideration, is attested by Seneca's utterance:[1] *Mira in quibusdam rebus verborum proprietas est, et consuetudo sermonis antiqui quædam efficacissimis notis signat.* Lichtenberg too says: "If one thinks much oneself, one finds a good deal of wisdom deposited in language. It is hardly likely that we have laid it all there ourselves, but rather that a great deal of wisdom really lies there."

In many, perhaps in all, languages, the action even of those bodies which are without intellect, nay of inanimate bodies, is expressed by the words *to will*, so that the existence of a will in these bodies is thus taken for granted; but they are never credited with a faculty for knowing, representing, perceiving or thinking: I know of no expression which conveys this.

Seneca, when speaking of lightning shot down from heaven, says:[2] "*In his, ignibus accidit, quod arboribus: quarum cacumina, si tenera sunt, ita deorsum trahi possunt, ut etiam terram attingant; sed quum permiseris, in locum suum exsilient. Itaque non est quod eum spectes cujusque rei habitum, qui illi non* ex voluntate *est. Si ignem permittis ire quo* velit, *cœlum repetet.*" In a more general sense Pliny says: *nec quærenda in ulla parte naturæ ratio, sed voluntas.*[1] Nor do we find Greek less fertile in instances. Aristotle, when explaining gravity, says: *μικρὸν μὲν μόριον τῆς γης, ἐὰν μετεωρισθὲν ἀφεθῇ, φέρεται, καὶ μένειν οὐκ ἐθέλει* (*parva quædam terræ pars, si elevata dimittitur, neque vult manere*).[2] And: *Δεῖ δὲ ἕκαστον λέγειν τοιοῦτον εἶναι, ὃ φύσει βούλεται εἶναι, καὶ ὃ ὑπάρχει, ἀλλὰ μὴ ὃ βίᾳ καὶ παρὰ φύσιν* (*unumquodque autem tale dicere oportet, quale naturâ suâ esse vult, et quod est; sed non id quod violentiâ et præter naturam est*).[3] Of great and more than merely linguistic importance is what Aristotle says in his "Ethica magna,"[4] where not only animals, but inanimate beings (fire striving upwards and earth downwards) are explicitly in question, and he asserts that they may be obliged to do something contrary to their nature or their will: *παρὰ φύσιν τι, ἢ παρ' ἃ βούλονται ποιεῖν*,—and therefore rightly places *παρ' ἃ βούλονται* as a paraphrase of *παρὰ φύσιν*.—Anacreon, in his 29th Ode, *εἰς Βάθυλλον*, in ordering the portrait of his lady-love, says of her hair: *Ἕλικας δ' ἐλευθέρους μοι πλοκάμων, ἄτακτα συνθείς, ἄφες, ὡς θέλωσι, κεῖσθαι* (*capillorum cirros incomposite jungens, sine utut volunt jacere*).[5] In German, Bürger says: "*hinab* will *der Bach, nicht hinan*" (the brook *will* go downwards not upwards). In daily life we constantly hear: "the water boils, it *will* run over,"—"the glass *will* break,"—"the ladder *will* not stand;"—"*le feu ne* veut *pas brûler.*"—"*la corde, une fois tordue,* veut *toujours se retordre.*"—In English, the verb '*to*

---

[1] Seneca, "Epist." 81.

[2] *Ibid.* "Quæst. nat." ii. 24.

---

[1] Plin. "Hist. nat." 37, 15.

[2] Aristot. "De Cœlo." ii. c. 13, "If a small particle of earth is lifted and let loose, it is carried away and will not rest." [Tr.'s add.]

[3] *Ibid.* c. 14, "But each thing ought to be named as it wills to be and really is according to its nature, not as it is by force and contrary to its nature." [Tr.'s add.]

[4] Arist. "Eth. Mag." i. c. 14.

[5] "Let the freely curling locks fall unarranged as they *will* [*like*]." [Tr.'s add.]

will' is even the auxiliary of the future of all the other verbs, thus expressing the notion, that there lies a will at the bottom of every action. In English moreover, the endeavours of all inanimate and unconscious things, are expressly designated by the word *want*, which denotes every sort of human desire or endeavour: "the water *wants* to get out,"—"the steam *wants* to find an issue."—In Italian too we have "vuol *piovere;*" "*quest' orologio non* vuol *andare.*"—The conception of willing is besides so deeply rooted in this last language, that it seems to indicate everything that is requisite or necessary: "*ci* vuol *un contrappeso;*" "*ci* vuol *pazienza.*"

A very striking instance of this is to be found even in Chinese—a language which differs fundamentally from all those belonging to the Sanskrit family—it is in the commentary to the Y-King,[1] accurately rendered by Peter Regis as follows: "*Yang, seu materia cœlestis,* vult *rursus ingredi, vel (ut verbis doctoris Tsching-tse utar)* vult *rursus esse in superiore loco; scilicet illius naturæ ratio ita fert, seu innata lex.*

The following passage from Liebig[2] has decidedly much more than a linguistic signification, for it expresses an intimate feeling and comprehension of the way in which a chemical process takes place. "Aldehyd arises, which with the same *avidity* as sulphurous acid, combines directly with oxygen to form acetic acid."—And again:[3] "Aldehyd, which absorbs oxygen from the air with *great avidity.*" As Liebig uses this expression twice in speaking of the same phenomenon, it can hardly be by chance, but rather because it was the only adequate expression for the thing.[4]

---

[1] "Y-King," ed. J. Mohl, vol. i. p. 341.

[2] Liebig, "Die Chemie in ihrer Anwendung auf Agrikultur," p. 394.

[3] *Ibid.* "Die Chemie in Anwendung auf Physiologie.

[4] French chemists likewise say: "*Il est évident que les métaux ne sont pas tous également* avides *d'oxygène.*" .... "*La difficulté de la réduction devait correspondre nécessairement à une* avidité *fort grande*

That most immediate stamp of our thoughts, language, shows us therefore, that every inward impulse must necessarily be conceived as volition; but it by no means ascribes knowledge to things as well. The agreement on this point between all languages, perhaps without a single exception, proves that here we have to do with no mere figure of speech, but that the verbal expression is determined by a deeply-rooted feeling of the inner nature of things.

du métal pour l'oxygène."—(See Paul de Rémusat, "La Chimie à l'Exposition." "L'Aluminium," "Revue des Deux Mondes," 1855, p. 649).

Vaninus ("De Amirandis Naturæ Arcanis," p. 170) had said: "*Argentum vivum etiam in aqua conglobatur, quemadmodum et in plumbi scobe etiam: at a scobe non refugit* (this is directed against an opinion expressed by Cardanus) *imo ex ea quantum potest colligit; quod nequit (scil. colligere), ut censeo,* invitum *relinquit:* natura enim et sua appetit, et vorat." This is evidently more than a form of words. He here quite decidedly attributes a will to quicksilver. And thus it will invariably be found that where, in physical and chemical processes, there is a reference to elementary forces of Nature and to the primary qualities of bodies which cannot be further deduced, these are always expressed by words which belong to the will and its manifestations. [Add. to 3rd ed.]

ANIMAL MAGNETISM AND MAGIC.

IN 1818, when my chief work first appeared, Animal Magnetism had only begun to struggle into existence. But, as to its explanation—although, to be sure, some light had been thrown upon the passive side of it, that is, upon what goes on within the patient, by the contrast between the cerebral and the ganglionic systems, to which Reil had drawn attention, having been taken for the principle of explanation—the active side, the agent proper by means of which the magnetiser evokes all these phenomena, was still completely shrouded in darkness. People groped about among all sorts of material principles of explanation, such as Mesmer's all-permeating ether, or the exhalations from the magnetiser's skin, assumed by Stieglitz to be the cause, &c. &c. At the utmost a nerve-spirit had been recognised and, after all, this was but a word for an unknown thing. The truth had scarcely begun to dawn upon a few persons, whom practice had more deeply initiated. But I was still far from hoping for any direct corroboration of my doctrine from Magnetism.

Dies diem docet however, and the great teacher, experience, has since brought to light an important fact concerning this deep-reaching agent which, proceeding from the magnetiser, produces effects apparently so contrary to the regular course of Nature that the long lasting doubt as to their existence, the stiff-necked incredulity, the condemnation of a Committee of which Lavoisier and Franklin were members, in short, the whole opposition that Magnetism encountered both in its first and second period (with the sole exception of the coarse, unintelligent condemnation without inquiry, which till very lately, prevailed in England) is quite excusable. The fact I allude to is, that this agent is nothing but the *will* of the magnetiser. To-day not a doubt exists on this point, I believe, among those who combine practice with insight; therefore I think it superfluous to quote the numerous assertions of magnetisers in corroboration of it.[1] Time has thus not only verified Puységur's watchword and that of the older French magnetisers: "*Veuillez et croyez!*" *i.e.* "Will with belief!" but this very watchword has even developed into a correct insight of the process itself.[2] From Kieser's "Tellurismus," still probably the most thorough and detailed text book of Animal Magnetism we have, it clearly results, that no act of Magnetism can take effect without the will; on the other hand the bare will, without any outward action, is able to produce every magnetic effect. Manipulation seems to be only a means of fixing, and so to say incorporating, the will and its direction. In this sense Kieser says: "Inasmuch as the human hand—being the organ by which Man's outward activity is most visibly expressed—is the efficient organ in magnetising, manipulation arises." De Lausanne, a French magnetiser, pronounces himself with still greater precision on this point in the Fourth Book of his "Annales du Magnétisme Animal" (1814-1816), where he says: "*L'action du magnétisme dépend de la seule volonté, il est vrai; mais l'homme ayant une forme* extérieure et sensible, *tout ce qui est à son usage, tout ce qui doit agir sur lui, doit nécéssairement*

---

[1] I only mention *one* work which has recently appeared, the explicit object of which is to show that the magnetiser's will is the real agent: "Qu'est ce que le Magnétisme?" par E. Gromier. (Lyon, 1850.)

[2] Puységur himself says in the year 1784: "*Lorsque vous avez magnétisé le malade, votre but était de l'endormir, et vous y avez réussi par le seul acte de votre volonté; c'est de même par un autre acte de volonté que vous le réveillez.*" (Puységur, "Magnét. Anim." 2me édit. 1820, "Catéchisme Magnétique," p. 150-171.) [Add. to 3rd ed.]

en avoir une, et pour que la volonté agisse, il faut qu'elle employe un mode d'action." As, according to my doctrine, the organism is but the mere phenomenon, the visibility, the objectivity of the will; nay, as it is properly speaking only the will itself, viewed as representation in the brain: so also does the outward act of manipulation coincide with the inward act of the will. But where magnetic effects are produced without manipulation, they take place as it were artificially, in a roundabout way, the imagination taking the place of the outer act and even occasionally that of personal presence: wherefore it is much more difficult and succeeds less frequently. Kieser accordingly alleges that the word "Sleep!" or "You must!" said aloud, has a more powerful effect upon a somnabulist than the mere inward willing of the magnetiser.—On the other hand manipulation, and in general outward action, is really an infallible means of fixing the magnetiser's will and promoting its activity; precisely because outward acts are quite impossible apart from all will, the body and its organs being nothing but the visibility of the will itself. This explains the fact, that magnetisers at times magnetise without any conscious effort of volition and almost without thinking, and yet produce the desired effect. On the whole, it is not the consciousness of volition, reflection upon it, that acts magnetically, but pure volition itself, as detached as possible from all representation. In Kieser's directions to magnetisers therefore,[1] we find all thinking and reflecting upon their respective doing and suffering, all conversation between them, forbidden both to physician and patient; also all outward impressions which arouse representations, the presence of strangers, and even daylight. He advises that everything should proceed as unconsciously as possible, as is likewise recommended in charm-cures. The true reason of all this is, that here the will operates in its primariness, as thing in itself; and this demands the exclusion, as far as possible, of representation, as a different sphere, as secondary to the will. Facts to prove that the real agent in magnetising is the will and each outward act only its vehicle, may be found in all the more recent and more trustworthy writings upon Magnetism, and it would be needless prolixity to repeat them here. Nevertheless I will quote *one* case, not as being especially striking, but as furnished by a remarkable person and having a peculiar interest as his testimony. Jean Paul says in a letter:[1] "Twice in a large company I have made Frau von K. nearly go to sleep by merely looking at her with a *firm will*, no one else knowing anything about it, and before that, I had brought on palpitation of the heart and pallor to such a degree that Dr. S. had to be summoned to her assistance."[2] Nowadays too, merely laying and keeping hold of the patient's hands while fixing the eye steadily upon him, is frequently substituted with complete success for the customary manipulation; precisely because even this outward act is suited to fix the will in a determined direction. But this immediate power which the will can exercise over other persons, is brought to light best of all by the admirable experiments made, even in public, by M. Dupotet and his pupils in Paris, in which a stranger is guided and determined at pleasure by the magnetiser's mere will, aided by a few gestures, and is even forced into the most extraordinary contortions. An apparently quite honestly written pamphlet, entitled "First glance into the wonder-world of Magnetism," by Karl Scholl (1853), contains a brief account of this.

---

[1] Kieser, "Tellur." vol. i. p. 400, *et seqq.*

---

[1] See "Wahrheit aus Jean Paul's Leben," vol. viii. p. 120.

[2] I had the good fortune in the year 1854 myself to witness some extraordinary feats of this kind, performed here by Signor Regazzoni from Bergamo, in which the immediate, *i.e.* magical, power of his will over other persons was unmistakeable, and of which no one, excepting perhaps those to whom Nature has denied all capacity for appre hending pathological conditions, could doubt the genuineness. There are nevertheless such persons: they ought to become lawyers, clergymen, merchants or soldiers, but in heaven's name not doctors; for the result would be homicidal, diagnosis being the principal thing in medicine.—Regazzoni was able at will to throw the somnambulist who was under his influence into a state of complete catalepsy, nay, he could make her fall down backwards, when he stood behind her and she was walking before him, by his mere will, without any gestures. He could paralyze her, give her *tetanos*, with the dilated pupils, the complete insensibility, and in short, all the unmistakeable symptoms of complete catalepsy. He made one of the lady spectators first play the piano; then standing fifteen paces behind her, he so completely paralyzed her by his will and gestures, that she was unable to continue playing. He next placed her against a column and charmed her to the spot, so that she was unable to move in spite of the strongest efforts.—*According to my own observation*, nearly all his feats are to be explained by his *isolating*

In the "Communications concerning the somnambulist, Auguste K. in Dresden" (1843), we find the truth in question confirmed in another way by what the somnambulist herself says, p. 53: "I was half asleep and my brother

---

the brain from the spinal marrow, either completely, in which case the sensible and motor nerves become paralyzed, and total catalepsy ensues; or partially, by the paralysis only affecting the *motor* nerves while sensibility remains—in other words, the head keeps its consciousness, while the body is apparently lifeless. This is precisely the effect of strychnine: it paralyzes the motor nerves only, even to complete *tetanos*, which induces death by *asphyxia;* but it leaves the sensible nerves, and with them consciousness, intact. Regazzoni does this same thing by the magic influence of his will. The moment at which this isolation takes place is distinctly visible in a peculiar trembling of the patient. I recommend a small French publication entitled "Antoine Regazzoni de Bergame à Francfort sur Mein," by L. A. V. Dubourg (Frankfurt, Nov. 1854, 31 pages in 8vo.) on Regazzoni's feats and the unmistakeably genuine character they bear for everyone who is not entirely devoid of all sense for organic Nature.

In the "Journal du Magnétisme," edit. Dupotet, of the 15th August, 1856, in criticizing a treatise: "De la Catalepsie, mémoire couronné," 1856, in 4to, the reviewer, Morin, says: "La plupart des caractères qui distinguent la catalepsie, peuvent être obtenus artificiellement et sans danger sur les sujets magnétiques, et c'est même là une des expériences les plus ordinaires des séances magnétiques." [Add. to 3rd ed.]

wished to play a piece he knew. As I did not like it, I requested him not to play it; nevertheless he tried to do so and then, by means of my firm will that he should not, I succeeded in making him unable to remember the piece, in spite of all his endeavours."—The thing is however brought to a climax when this immediate power of the will is extended even to inanimate bodies. However incredible this may appear, we have nevertheless two accounts of it coming from entirely different quarters. In the book just mentioned,[1] it is related and testified by witnesses, that Auguste K. caused the needle of the compass to deviate at one time 7° and at another 4°, this experiment moreover being repeated four times. She did this moreover without any use of her hands, through her mere will, by looking steadily at it.—The Parisian somnambulist, Prudence Bernard, again in a public *séance* in London, at which Mr. Brewster, the physicist's son and two other gentlemen from among the spectators acted as jurors, made the compass needle deviate and follow her movements by simply turning her head round.[2]

Now, if we thus see the will—stated by me to be the thing in itself, the only real thing in all existence, the kernel of Nature—accomplish through the human individual, in Animal Magnetism and even beyond it, things which cannot be explained according to the causal nexus, *i.e.* in the regular course of Nature; if we find it in a sense even annulling Nature's laws and actually performing *actio in distans*, consequently manifesting a supernatural, that is, metaphysical, mastery over Nature—what corroboration better founded on fact could I desire for my doctrine? Was not even Count Szapary, a magnetiser who certainly did not know my philosophy, led by the results of his own experience, after writing the title of his book: "A word about Animal Magnetism, soul-bodies and vital essence,"[1] to add the following remarkable explanatory words: "or physical proofs that the current of Animal Magnetism is the element, and *the will the principle of all spiritual and corporeal life?*"[2]—According to this, Animal Magnetism presents itself directly as *practical Metaphysic*, which was the term used by Bacon of Verulam[3] to define Magic in his classification of the sciences: it is empirical or experimental Metaphysic.—Further, because the will manifests itself in Animal Magnetism downright as the thing in itself, we see the *principium individuationis* (Space and Time), which belongs to mere phenomenon, at once annulled: its limits which separate individuals from one another, are destroyed; Space no longer separates magnetiser and somnambulist; community of thoughts and of motions of the will appears; the state of *clairvoyance* overleaps the relations belonging to mere phenomenon and conditioned by Time and Space, such as proximity and distance, the present and the future.

---

[1] "Mittheilungen über die Somnambüle, Auguste K., in Dresden." 1845, pp. 115, 116, and 318.

[2] See extract from the English periodical "Britannia," in "Galignani's Messenger," of the 23rd October, 1851.

In consequence of these facts, notwithstanding many reasons and prejudices to the contrary, the opinion has gradually gained ground, nay almost raised itself to certainty, that Animal Magnetism and its phenomena are identical with part of the Magic of former times, of that ill-famed occult art, of whose reality not only the Christian ages by which it was so cruelly persecuted, but all, not excepting even savage, nations on the whole of the earth, have been equally convinced throughout all ages. The Twelve Tables of the Romans,[1] the Books of Moses, and even Plato's Eleventh Book on Laws, already made its practice punishable by death, and Apuleius' beautiful speech [2] before the court of justice, when defending himself against the charge of practising magic by which his life was menaced, proves how seriously this matter was taken even in the most enlightened Roman period, under the Antonines; since he merely tries to clear himself personally from the charge in question, but by no means contests the possibility of witchcraft and even enters into a host of absurd details such as are wont to figure in all the mediæval trials for witchcraft. The eighteenth century makes an exception as regards this belief in Magic, and this is mainly because Balthasar Becker, Thomasius and some others, with the good intention of putting an end once for all to the cruel trials for witchcraft, declared all magic to be impossible. Favoured by the philosophy of the age, this opinion soon gained the upper hand, although only among the learned and educated classes. The common people have never ceased to believe in witchcraft, even in England; though here the educated classes contrive to unite a degrading religious bigotry with the firm incredulity of a Saint Thomas (or of a Thomasius) as to all facts transcending the laws of impact and counter-impact, acids and alkalis, and refuse to lend an ear to their great countryman, when he tells them that 'there are more things in heaven and earth than are dreamt of in their philosophy.' One branch of Magic is still notoriously preserved and practised among the lower orders, being tolerated on account of its beneficent purpose. This is *curing by charms* (*sympathetische Kuren*, as they are called in German), the reality of which can hardly be doubted. Charming away warts, is one of the commonest forms of this practice, and of this Bacon of Verulam, cautious and empirical though he was, attests the efficacy from personal experience.[1] The charming away of erisypelas in the face by a spell, is another instance, and so often succeeds, that it is easy to convince oneself of its existence. Fever too is often successfully combated by spells, &c. &c.[2]—That, in all this, the real agents are not the meaningless words and ceremonies, but that it is the will of the operator which acts, as in Animal Magnetism, needs no further explanation after what has been said above. For such as are still unacquainted with charm-cures, instances may be found in Kieser.[3]—These two facts therefore, Animal Magnetism and Charm-curing, bear empirical evidence to the possibility of magical, as opposed to physical, influence, which possibility had been so peremptorily rejected by the past century; since it refused to recognise as possible any other than physical influences brought about in the way of the intelligible nexus of causality.

---

[1] Szapary, "Ein Wort über Animalischen Magnetismus, Seelenkörper und Lebensessenz" (1840).

[2] "Oder physische Beweise, dass der Animalisch-magnetische Strom das Element, und *der Wille das Princip alles geistigen und Körperlichen Lebens sei.*"

[3] Bacon, "Instaur. Magna," L. III.

---

[1] Plin. hist. nat. L. 30, c. 3. [Add. to 3rd ed.]

[2] Apuleius, "Oratio de Magia," p. 104. Bip.

---

[1] Bacon, "Silva Silvarum," § 997.

[2] In the "Times" of June the 12th, 1855, we find, p. 10, the following:—

"A Horse-charmer.

"On the voyage to England the ship 'Simla' experienced some heavy weather in the Bay of Biscay, in which the horses suffered severely, and some, including a charger of General Scarlett, became unmanageable. A valuable mare was so very bad, that a pistol was got ready to shoot her and to end her misery; when a Russian officer recommended a Cossak prisoner to be sent for, as he was a 'juggler' and could, by charms, cure any malady in a horse. He was sent for, and immediately said he could cure it at once. He was closely watched, but the only thing they could observe him do was to take his sash off and tie a knot in it three several times. However the mare, in a few minutes, got on her feet and began to eat heartily, and rapidly recovered." [Add. to 3rd ed.]

[3] Kieser, "Archiv. für den thierischen Magnetismus," vol. v. heft 3, p. 106; vol. viii. heft 3, p. 145; vol. ix. heft 2, p. 172; and vol. ix. heft 1, p. 128; Dr. Most's book likewise: "Über Sympathetische Mittel und Kuren," 1842, may be used as an introduction to this matter. (And even Pliny indicates a number of charm-cures in the 28th Book, chaps. 6 to 17. [Add. to 3rd ed.])

It is a fortunate circumstance, that the rectification of this view in our time should have come from medical science; because it ensures us at the same time against the danger of the pendulum of opinion receiving too strong an impulse in the contrary direction, and thus carrying us back to the superstition of ruder ages. Besides, as I have said, Animal Magnetism and Charm-curing only save the reality of a part of Magic, which included a good deal more, a considerable portion of which must, for the present at least, remain under the old sentence of condemnation or be left in uncertainty; whereas another portion will at any rate have to be conceived as possible, through its analogy to Animal Magnetism. For Animal Magnetism and Charm-cures are but salutary influences exercised for curative purposes, like those recorded in the "History of Magic" as practised by the so-called (Spanish) *Saludadores*,[1] who nevertheless were also condemned by the Church; whereas Magic was far oftener practised with an evil intent. Nevertheless, to judge by analogy, it is more than probable, that the same inherent force which, by acting directly upon another individuality, can exercise a salutary influence, will be at least as powerful to exercise a prejudicial and pernicious one. If therefore there was reality in any part of ancient Magic beyond what may be referred to Animal Magnetism and curing by charms, it must assuredly have been in that which is called *maleficium* and *fascinatio*, the very thing that gave rise to most of the trials for witchcraft. In Most's book, too, already mentioned,[2] a few facts are related which must undoubtedly be ascribed to *maleficium*; in Kieser[1] also we find instances of diseases which had been transmitted, especially to dogs, who died of them. In Plutarch[2] we find that *fascinatio* was already known to Democritus, who tried to explain it as a fact. Now admitting these stories to be true, they give us the key to the crime of witchcraft, the zealous persecution of which would therefore not have been quite without reason. For even if in most cases it may have been founded upon error and abuse, we are still not authorized to look upon our forefathers as having been so utterly benighted, as to persecute with the utmost vigour and cruelty for so many ages an absolutely impossible crime. From this point of view moreover, we can also understand that the common people should still even to the present day persist in attributing certain cases of illness to a *maleficium*, and are not to be dissuaded from this conviction. Now if we are thus induced by the progress of the age to modify the extreme view adopted by the last century concerning the absolute nullity of this ill-famed art—at any rate with respect to some part of it—still nowhere is caution more necessary than here, in order to fish out from the chaos of fraud, falsehood and absurdity contained in the writings of Agrippa von Nettesheim, Wierus, Bodinus, Delrio, Bindsfeldt, &c. &c., the few isolated truths that may lie in them. For, frequent though they may be throughout the world, nowhere have lies and deceit freer play than where Nature's laws are avowedly set aside, nay declared invalid. Here therefore we find the wildest fictions, the strangest freaks of the imagination worked up into an edifice, lofty as the skies, on the narrow foundation of the slight particle of truth there may have been in Magic, and in consequence of this, the most sanguinary atrocities perpetrated age after age. In contemplating such things, the psychological reflection on the unlimited capability of the human intellect for accepting the most incredible absurdities and the readiness of the human heart to set its seal to them by cruelty, prevails over every other.

---

[1] Delrio. "Disqu. Mag." L. III. P. 2, q. 4, s. 7—and Bodinus, "Mag. Dæmon," iii. 2.

[2] See note [2], p. 334, especially pp. 40, 41, and Nos. 89, 91, and 97 of Most's book.

---

[1] Kieser, "Archiv. f. t. M." See the account of Bende Bensen's illness, vol. ix. to vol. xii.

[2] Plutarch, "Symposiacæ quæstionis," qu. v. 7. 6.

Yet the modification which has taken place of late in the views of German *savants* respecting magic, is not due exclusively to Animal Magnetism. The deep foundations of it had already been laid by the change in philosophy wrought by Kant, which makes German culture differ fundamentally from that of the rest of Europe, with respect to philosophy as well as to other branches of knowledge.—For a man to be able to smile beforehand at all occult sympathies, let alone magical influences, he must find the world very, nay completely, intelligible. But this is only possible if he looks at it with the utterly superficial glance which puts away from it all suspicion that we human beings are immersed in a sea of riddles and mysteries and have no exhaustive knowledge or understanding either of things or of ourselves in any direct way. Nearly all great men have been of the opposite frame of mind and therefore, whatever age or nation they belonged to, have always betrayed a slight tinge of superstition. If our natural mode of knowing were one that handed over to us things in themselves immediately and consequently gave us the absolutely true relations and connections of things, we might then, no doubt, be justified in rejecting *à priori*, therefore unconditionally, all prescience of future events, all apparitions of absent, of dying, let alone of deceased persons, and all magical influence. But if all that we know is, as Kant teaches, mere phenomenon, the forms and laws of which do not extend to things in themselves, it must be obviously premature to reject all foreknowledge, all apparitions and all magic; since that

Synchronicity

rejection is based upon laws, whose *à priori* character precisely restricts them to phenomena; whereas things in themselves, to which even our own inner self must belong, remain untouched by them. But it is quite possible for these very things in themselves to have relations with us from which the above-mentioned occurrences may have arisen, concerning which accordingly we have to wait for the decision *à posteriori*, and must not forestall it. That the English and French should persist in denying *à priori* all such occurrences, comes at the bottom from the influence of Locke's philosophy, under which these nations still stand as to all essential points, and by which we are taught that, after merely subtracting sensation, we know things in themselves. According to this view therefore, the laws of the material world are held to be ultimate, and no other influence than *influxus physicus* is admitted. Consequently these nations believe, it is true, in a physical, but not in a metaphysical, science, and therefore reject all other than so-called "Natural Magic:" a term which contains the same *contradictio in adjecto* as "Supernatural Physics," but is nevertheless constantly used quite seriously, while the latter was used but once, and then in joke, by Lichtenberg. On the other hand, the common people, with their universal readiness to give credit to supernatural influences, express by it in their own way the conviction, that all things which we perceive and comprehend are mere phenomena, not things in themselves; although, with them, conviction is only felt. I quote the following passage from Kant's "Grundlegung zur Metaphysik der Sitten," as a proof that this is not saying too much: "There is an observation requiring no great subtlety of reflection, which we may on the contrary suppose the most ordinary understanding capable of making, albeit in its own way and by an obscure distinction of the faculty of judgment, which it calls feeling. It is this: that all our involuntary representations (such as those of the senses) give us no further knowledge of objects than as they affect us, whereby we are left in ignorance as to what those objects may be in themselves; that, as far as this sort of representation is concerned therefore, we are still only able by this means to attain knowledge of phenomena, but never of *things in themselves*, even by dint of the utmost clearness and the most strenuous attention the understanding is able to give to this point. When once this distinction is made, however, it stands to reason, that the existence of something else behind these phenomena, something which is not phenomenon, *i.e.* the thing in itself, has still to be admitted and assumed."[1]

When we read D. Tiedemann's "History of Magic,"[2] we are astonished at the persistency with which mankind have clung to the thought of Magic in all places and at all times, notwithstanding frequent failure; and we come to the conclusion, that this thought must, to say the least, be deeply rooted in human nature, if not in things in general, and cannot be a mere arbitrary creation of the fancy. Although Magic is differently defined by the various authors who have treated of it, the fundamental thought which predominates in all its definitions is nevertheless unmistakeable. For the opinion, that there must be another quite different way of producing changes in the world besides the regular one through the causal nexus between bodies, and one moreover which is not founded at all upon that nexus, has found favour in all ages and countries. Therefore also the means belonging to this second way appeared absurd, when they were viewed in the same light as the first; since the cause applied was obviously not suited to the effect intended and a causal nexus between them was impossible. But here it was assumed, that apart from the outer connection between the phenomena of this world on which the *nexus physicus* is founded, there must exist another besides, passing through the very essence in itself of all things: a subterranean connection as it were, by means of which immediate action was possible from *one* point of the phenomenon on to every other point, through a *nexus metaphysicus*;

---

[1] Kant, "First Principles of Ethical Metaphysic," 3rd edition, p. 105.

[2] D. Tiedemann, "Disputatio de quæstione, quæ fuerit artum magicarum origo." Marb. 1787. A prize-essay written for the Göttingen Society.

that accordingly, it must be possible to act upon things from inside, instead of from outside, as is usual;

that it must be possible for phenomenon to act upon phenomenon by means of that being in itself, which is one and the same in all phenomena;

that, just as we act causally as *natura naturata*, we might probably be able to act also as *natura naturans*, and momentarily to enable the microcosm to play the part of the macrocosm;

that, however firm the partition walls of individuation and separation might be, they might nevertheless occasionally permit a communication to take place as it were behind the scenes, or like a secret game under the table; and

that, just as a neutralisation of individual isolation takes place in somnambulistic *clairvoyance*, so likewise might a neutralisation of the will in the individual be possible. Such a thought as this cannot have arisen empirically, nor can it have been confirmation through experience that has preserved it throughout all ages and in all countries: for in the majority of cases experience must result downright unfavourably to it. I opine therefore, that the origin of this thought, which has universally held its ground with the whole of mankind and, in spite of so much conflicting experience, in defiance of common sense, has never been eradicated, must be sought at great depth: namely in the inward feeling of the omnipotence of the will in itself—of that will, which constitutes at once the inner essence of Man and of the whole of Nature—and in the assumption connected with it that, somehow or other, this omnipotence might possibly for once make itself felt, even when proceeding from the individual. People were unable to investigate and distinguish the difference between the capabilities of the will as thing in itself and the same will in its individual manifestation; but they assumed without further ado, that under certain circumstances, the will might be enabled to break through the barriers of individuation. For the above-mentioned feeling rebelled obstinately against the knowledge forced upon it by experience, that

> "Der Gott der mir im Busen wohnt,
> Kann tief mein Innerstes erregen,
> Der über allen meinen Kräften thront,
> Er kann nach Aussen nichts bewegen."

According to the fundamental thought just expounded, we find that the physical medium used in all attempts at magic, never was regarded in any other light than in that of a vehicle for a thing metaphysical; otherwise it could evidently stand in no relation whatever to the effect contemplated. These media consisted in cabalistic words, symbolical actions, traced figures, wax images, &c. &c. We see too that, according to the original feeling, what this vehicle conveyed, was in the last resort always an act of *volition* that had been connected with it. The very natural inducement to do this, was the observation, that every moment men became aware of a completely unaccountable, that is, evidently metaphysical, agency of the will, in the movements of their own bodies. Might not this agency, they thought, be extended to other bodies also? To find out a way to annul the isolation in which the will finds itself in each individual, and to extend the immediate sphere of the will's action beyond the organism of the person willing, was the aim of Magic.

A great deal was nevertheless still wanting ere this fundamental thought, from which Magic seems properly to have sprung, could pass over at once into distinct consciousness and be recognised *in abstracto*, and ere Magic could at once understand itself. Only a few thoughtful and learned writers of former ages—as I mean soon to prove by quotations—express the distinct thought, that it is in *the will* itself that the magic power lies, and that the strange signs and acts together with the senseless words that accompanied them, which passed for the means of exorcising and the connecting link with demons, are in fact merely vehicles and means for fixing *the will*, by which the act of volition, which is to act magically, ceases to be mere wish and becomes deed, or, to use the language of Paracelsus, "receives a *corpus*," and the individual will in a sense distinctly proclaims that it is now acting as general will, as will in itself. For in every act of Magic—charm-cure or whatever else it may be—the outward action (the connecting link) is exactly what the passes are in magnetising: *i.e.* not what is really essential, but the mere vehicle, that by which the will, the only real agent, is directed and fixed in the material world and enters into reality. As a rule therefore, it is indispensable.—From the rest of the writers of those times we gather that, in conformity with that fundamental thought of Magic, their only aim was to obtain absolute, arbitrary power over Nature. But they were unable to elevate themselves to the thought that this power must be a *direct* one; they conceived it, on the contrary, absolutely as an *indirect* one. For all religions in all countries had placed Nature under the dominion of gods and of demons. Now, it was the magician's endeavour to subject these gods and demons to his will, to induce, nay, to force them to serve him; and he attributed all that he succeeded in achieving to their agency, just as Mesmer attributed the success of his Magnetism to the magnetic rods he held in his hands, instead of to his will which was the real agent. It was in this sense that all polytheistic nations took the matter, and even Plotinus,[1] but more especially Iamblichus, understood Magic: that is, as *Theurgy*, an expression which Porphyry was the first to use. That divine aristocracy, Pantheism, was favourable to this interpretation, since it distributed the dominion over the different forces of Nature among as many gods and demons—mostly mere personifications of natural forces—and the magician, by persuasion or by force, subjected now one, now the other of these divinities to his power and made them do his bidding. But in a Divine Monarchy, where all Nature obeys a single ruler, the thought of contracting a private alliance with the Almighty, let alone of exercising sovereignty over him, would have been too audacious. Therefore where Judaism, Christianity or Islam prevailed, the omnipotence of the one God stood in the way of this interpretation of Magic: an omnipotence which the magician could not venture to attack. He had no alternative therefore, but to take refuge with the Devil, and with this rebellious spirit—perhaps even direct descendant of Ahriman—to whom some power over Nature was still attributed, he now entered into a compact, by which he ensured to himself his assistance. This was "necromancy" (the 'black art'). Its antithesis, 'white Magic,' was opposed to it by the circumstance that, in it, the magician did not make friends with the Devil, but rather solicited the permission, not to say co-operation, of the Almighty himself, to intercede with the angels; oftener still, he invoked devils by pronouncing the rarer Hebrew names and titles of the One God, such as Adon-Ai, &c. &c., and compelled them to obey him, without promising them anything in return for their services, in a hell-compulsion[1] (*Höllenzwang*).—But all these mere interpretations and outward trappings of the thing were received so entirely as its essence and as objective processes, that writers like Bodinus, Delrio, Bindsfeldt, &c., whose knowledge of magic was second-hand and not derived from personal experience, all assert the essential characteristic of Magic to be, that it does not act either through forces of Nature or in a natural way, but through the assistance of the Devil. This view was, and long remained, current everywhere, locally modified according to the religions which prevailed in different countries. The laws against sorcery and the trials for witchcraft were based upon it; likewise, wherever the possibility of Magic was contested, the attacks were generally directed against this opinion. An objective view, such as this, was an inevitable consequence of the decided Realism which prevailed throughout ancient and mediæval Europe and which Descartes was the first to disturb. Till then, Man had not learnt to direct the light of speculative thought towards the mysterious depths of his own inner self, but, on the contrary, had sought everything outside himself. Above all the thought of making the will he found within him rule over Nature, was so bold, that people would have been alarmed by it: therefore it was made to rule over fictitious beings, supposed by the prevailing superstition to have command over Nature, in order through them to obtain at least indirect mastery over Nature. Every sort of god or demon moreover, is always a hypostasis, by which believers of all sects and colours bring to their own comprehension the *Metaphysical*, that which lies *behind* Nature, that which gives her existence and consistence and consequently rules over her. Thus, when it is said, that Magic acts by the help of demons, the meaning which lies at the bottom of this thought still is, that it is an agency which is not physically, but *metaphysically* exercised: that it is not a natural, but a supernatural, agency. Now if, in the small amount of fact which speaks in favour of the reality of Magic: that is, in Animal Magnetism and charm-cures, we still do not recognise anything but an immediate action of the will which here manifests its direct power outside, instead of inside, the individual; if moreover, as I am about to show and to substantiate by decisive, unequivocal citations, those who are more deeply initiated into ancient Magic, derive all its effects from the magician's will alone: this is surely strong empirical evidence in support of my doctrine, that the Metaphysical in general, that which alone exists apart from representation, the *thing in itself* of the universe—is nothing but what is known to us within ourselves as *the will.*

---

[1] Here and there, Plotinus betrays a more correct knowledge, for instance, "Enn." ii. lib. iii. c. 7; "Enn." iv. lib. iii. c. 12, et lib. ix. c. 3.

---

[1] Delrio, "Disq. mag." L. ii. qu. 2. Agrippa a Nettesheym, "De Vanit. Scient." c. 45.

Now, if the direct power which may occasionally be exercised over Nature by the will, was conceived by those magicians as a merely indirect one, acquired by the help of demons, this still could not prevent its efficiency wherever and whenever it may have taken place. For, precisely because, in things of this kind, the will acts in itself, in its primariness, therefore apart from representation, its efficiency cannot be frustrated by erroneous conceptions of the intellect; on the contrary, the distance here is a wide one between theory and practice: the errors of the former do not stand in the way of the latter, nor does a correct theory qualify for practice. Mesmer, in the beginning, attributed his agency to the magnetic rods he held in his hands and later on explained the wonders of Animal Magnetism by a materialistic theory of a subtle, all-permeating fluid; nevertheless he produced wonderfully powerful effects. I once myself knew the proprietor of an estate, whose peasants were wont by tradition to have their feverish attacks dispelled by a spell of their master's. Now, although he believed he had convinced himself of the impossibility of all such things, yet he continued good-naturedly to comply with their wish as usual, and indeed often succeeded in relieving them. This success he ascribed to his peasants' firm belief, forgetting that a similar faith ought also to bring success to the medical treatment which is so often applied with complete inefficacy to believing patients.

Now, if Theurgy and Demonomagic, as described above, were but the mere interpretation and outward trappings of the thing, the mere husk, at which the majority were content to stop short; there were nevertheless some, who went below the surface and quite recognised that the agent in influences supposed to proceed from magic, was absolutely nothing but *the will.* We must not however look for such deeper observers as these among the discountenancers and antagonists of Magic, and the majority of the writers on this subject belong precisely to these: they derived their knowledge exclusively from Courts of Justice and from the examination of witnesses, so that they merely describe the outside of the matter; and, if at any time they chanced, through confessions, to gain an insight into the inner processes, they took good care not to betray that knowledge, lest, by doing so, they should contribute to diffuse the terrible vice of sorcery. To this class belong Bodinus, Delrio, Bindsfeldt, and others. For information as to the real nature of the thing, we must on the contrary go to philosophers and investigators of Nature, who wrote in those times of prevailing superstition. Now, from what they say, it clearly follows, that the real agent in Magic, just as in Animal Magnetism, is nothing but *the will.* Here I must quote some passages in support of this assertion.[1] Theophrastus Paracelsus especially discloses perhaps more concerning the inner nature of Magic than any other writer, and does not even hesitate to give a minute description of the processes used in it.[1]—He says:[2] "To be observed concerning wax images: if I bear malice in my will against anyone, that malice must be carried out by some medium or *corpus*. Thus it is possible for my spirit to stab or wound another person without help from my body in using a sword, merely by my *fervent desire*. Therefore it is also possible for me to convey my opponent's spirit into the image by my *will* and then to deform or paralyze it at pleasure.—You must know, that the influence of the *will* is a great point in medicine. For if a man hate another and begrudge him anything good, it is possible that if he curse him, that curse may take effect.—This occurs also with animals and more easily than with men; for the spirit of man has far greater power of resistance than that of animals."

---

[1] Roger Bacon already in the thirteenth century said: . . . . "*Quod si ulterius aliqua anima maligna cogitat fortiter de infectione alterius,*

And p. 375: "It follows from this, that one image has magic power over another, not by virtue of the characters or anything of that kind impressed on the virgin wax; but the imagination overcomes its own constellation, so as to become a means for fulfilling the will of its heaven, *i.e.* of its man."

p. 334: "All the imagining of man comes from his heart. The heart is the sun of the microcosm. And all the imagining of man passes from the small sun of the microcosm into the sun of the great Universe, into the heart of the macrocosm. Thus the *imaginatio* of the microcosm is a seed which becomes material," &c.

---

atque ardenter desideret et certitudinaliter intendat, atque vehementer consideret se posse nocere, non est dubium quin natura obediet cogitationibus animæ." (See Rogeri Bacon, "Opus Majus," Londini, 1733, p. 252.)

[1] Theophrastus Paracelsus, Strassburg edition in two folio vols., vol. i. pp 91, 353, *et seqq.* and p. 789; vol. ii. pp. 362, 496.

[2] Vol. i. p. 19.

p. 364: "It suffices for you to know what rigorous imagination does, which is the beginning of all magical works."

p. 789: "Even my thought therefore is a looking at a mark. Now I must not turn my eye with my hands in this or that direction; but my imagination turns it as I wish. And this is also to be understood of walking: I desire, I propose to myself, therefore my body moves, and the firmer my thoughts, the more sure it is that I shall run. Thus *imaginatio* alone is an impulse for my running."

p. 837: "*Imaginatio* used against me may be employed with such rigour, that I may be killed by the *imaginatio* of another person."

Vol. ii. p. 274: "Imagination comes from longing and desire: envy, hatred, proceed from longing, for they do not arise unless you long for them. As soon as you wish, the act of the imagination follows. This longing must be quick, ardent, lively, as that of a pregnant woman, &c. &c.—A general curse is commonly verified. Why? It comes from the heart, and the seed lies and is born in that coming from the heart. Thus parents' curses also come from the heart. The curse of the poor is likewise *imaginatio*. The prisoner's curse, also mere *imaginatio*, comes from the heart. . . . . Thus too, when one man wishes to stab or paralyze, &c., another by means of his *imaginatio*, he must first attract the thing and instrument to himself and then he can impress it (with his wish): for whatever enters into it, may also go out of it again by the medium of thought as well as by that of the hands. . . . . In such imagining, women outdo men . . . . for they are more ardent in revenge."

p. 298: "*Magica* is a great occult wisdom; just as Reason is a great, open folly. . . . . No armour avails against sorcery, for it wounds the inner man, the vital spirit. . . . . Some magicians make an image in the shape of a man they intend [to harm], knock a nail into the sole of its foot, and the man is invisibly struck with lameness, until the nail is removed."

p. 307: "We ought to know, that we may convey the spirit of any man into an image, solely by faith and by our strong imagination.—No incantation is needed, and the ceremonies, drawing of circles, fumigations, seals, &c. &c. are mere humbug to mislead.—*Homunculi* and images are made, &c. &c . . . . by which all the operations, powers and will of man are carried out. . . . . The human heart is indeed so great a thing, that no one can express it: as God is eternal and imperishable, so also is the heart of man. If we men thoroughly recognised our heart, nothing would be impossible for us on earth. . . . . Perfect imagination, coming from the stars (*astris*) arises from the heart."

p. 513: "*Imaginatio* is confirmed and rendered perfect by the belief that it really takes place: for every doubt injures the effect. Faith must confirm the imagination, for faith decides the will. . . . . But just the fact that man does not always perfectly imagine, perfectly *believe*, causes acts to be called uncertain, which nevertheless may certainly and quite well exist." A passage from Campanella's book, "De sensu rerum et magia," may serve to elucidate this last sentence. *Efficiunt alii ne homo possi futuere, si tantum credat: non enim potest facere quod non credit posse facere* (l. iv. c. 18).

Agrippa von Nettesheim[1] speaks in the same sense. "*Non minus subjicitur corpus alieno animo, quam alieno corpori;*" and:[2] "*Quidquid dictat animus fortissime odientis habet efficaciam nocendi et destruendi; similiter in ceteris, quæ affectat animus fortissimo desiderio. Omnia enim quæ tunc agit et dictat ex characteribus, figuris, verbis, gestibus et ejusmodi, omnia sunt adjuvantia appetitum animæ et acquirunt mirabiles quasdam virtutes, tum ab anima labo-*

---

[1] "De occulta philosophia," lib. 1, c. 66.

[2] *Ibid.* c. 67.

rantis in illa hora, quando ipsum appetitus ejusmodi maxime invadit, tum ab influxu cœlesti animum tunc taliter movente."[1]—"*Inest hominum animis virtus quædam immutandi et ligandi res et homines ad id quod desiderat, et omnes res obediunt illi, quando fertur in magnum excessum alicujus passionis, vel virtutis, in tantum, ut superet eos, quos ligat. Radix ejusmodi ligationis ipsa est affectio animæ vehemens et exterminata.*"

And likewise Jul. Cæs. Vanninus, "De admir. naturæ arcan." L. iv. dial. 5, § 435: "*Vehementem imaginationem, cui spiritus et sanguis obediunt, rem mente conceptam realiter efficere, non solum intra, sed et extra.*"[2]

Just so Joh. Bapt. Van Helmont, who takes great pains to explain away as much as possible of the Devil's influence, in order to attribute it to the will. I quote a few passages from the voluminous collection of his works, *Ortus Medicinæ:*

Recepta injecta. § 12. *Quum hostis naturæ (diabolus)*

---

[1] "De occulta philosophia," lib. 1, cc. 66, 67 *et* 68.

[2] *Ibid.* p. 440: *Addunt Avicennæ dictum:* "*Ad validam alicujus imaginationem cadit camelus.*" *Ibid.* p. 478, speaking of charms: *fascinatione quis cum muliere coeat*, he says: *Equidem in Germania complures allocutus sum vulgari cognomento Necromantistas, qui ingenue confessi sunt, se firme satis credere, meras fabulas esse opiniones, quæ de dæmonibus vulgo circumferuntur, aliquid tamen ipsos operari, vel vi herbarum commovendo phantasiam, vel vi imaginationis et fidei vehementissimæ, quam ipsorum nugacissimis confictis excantationibus adhibent ignaræ mulieres, quibus persuadent, recitatis magna cum devotione aliquibus preculis, statim effici fascinum, quare credulæ ex intimo cordis effundunt excantationes, atque ita, non vi verborum, neque caracterum, ut ipsæ existimant, sed spiritibus* *), *fascini inferendi percupidis exsufflatis proximos effascinant. Hinc fit, ut ipsi Necromantici, in causa propria, vel aliena, si soli sint operarii, nihil unquam mirabile præstiterint: carent enim fide, quæ cuncta operatur.* [Add. to 3rd ed.]

---

* Schopenhauer has added to *spiritibus* in parenthesis (*sc. vitalibus et animalibus*).

ipsam applicationem complere ex se nequeat, suscitat ideam fortis desiderii et odii in saga, ut, mutuatis istis mentalibus et liberis mediis, transferat suum velle per quod quodque afficere intendit).[1] *Quorsum imprimis etiam execrationes, cum idea desiderii et terroris, odiosissimis suis scrofis præscribit.*—§ 13. *Quippe desiderium istud, ut est passio imaginantis, ita quoque creat ideam, non quidem inanem, sed executivam atque incantamenti motivam.*—§ 19. *prout jam demonstravi, quod vis incantamenti potissima pendeat ab idea naturali sagæ.*

De injectis materialibus. § 15. *Saga, per ens naturale, imaginative format ideam liberam, naturalem et nocuam. . . . Sagæ operantur virtute naturali. . . . Homo etiam dimittit medium aliud executivum, emanativum et mandativum ad incantandum hominem; quod medium est Idea fortis desiderii. Est nempe desiderio inseparabile ferri circa optata.*

De sympatheticis mediis. § 2. *Ideæ scilicet desiderii, per modum influentiarum cœlestium, jaciuntur in proprium objectum, utcunque localiter remotum. Diriguntur nempe a desiderio objectum sibi specificante.*

De magnetica vulnerum curatione. § 76. *Igitur in sanguine est quædam potestas exstatica, quæ, si quando ardenti desiderio excita fuerit, etiam ad absens aliquod objectum, exterioris hominis spiritu deducenda sit: ea autem potestas in exteriori homine latet, velut in potentia; nec ducitur ad actum, nisi excitetur, accensa imaginatione ferventi desiderio, vel arte aliqua pari.*—§ 98. *Anima, prorsum spiritus, nequaquam posset spiritum vitalem (corporeum equidem), multo minus carnem et ossa movere aut concitare, nisi vis illi quæpiam naturalis, magica tamen et spiritualis, ex anima in spiritum et corpus descenderet. Cedo, quo pacto obediret spiritus corporeus jussui animæ, nisi jussus spiritum,*

---

[1] "Der Teufel hat sie's zwar gelehrt;
Allein der Teufel kann's nicht machen."—Faust.
[Add. to 3rd ed.]

et deinceps corpus movendo foret? At extemplo contra hanc magicam motricem objicies, istam esse intra concretum sibi, suumque hospitium naturale, idcirco hanc etsi magam vocitemus, tantum erit nominis detorsio et abusus, siquidem vera et superstitiosa magica non ex anima basin desumit; cum eadem hæc nil quidquam valeat, extra corpus suum movere, alterare aut ciere. Respondeo, vim et magicam illam naturalem animæ, quæ extra se agat, virtute imaginis Dei, latere jam obscuram in homine, velut obdormire (post prævaricationem), excitationisque indigam: quæ eadem, utut somnolenta, ac velut ebria, alioqui sit in nobis quotidie: sufficit tamen ad obeunda munia in corpore suo: dormit itaque scientia et potestas magica, et solo nutu actrix in homine.—§ 102. *Satan itaque vim magicam hanc excitat (secus dormientem et scientia exterioris hominis impeditam) in suis mancipiis, et inservit eadem illis, ensis vice in manu potentis, id est sagæ. Nec aliud prorsus Satan ad homicidium affert, præter excitationem dictæ potestatis somnolentæ.*—§ 106. *Saga in stabulo absente occidit equum: virtus quædam naturalis a spiritu sagæ, et non a Satana, derivatur, quæ opprimat vel strangulet spiritum vitalem equi.*—§ 139. *Spiritus voco magnetismi patronos, non qui ex cœlo demittuntur, multoque minus de infernalibus sermo est; sed de iis, qui fiunt in ipso homine, sicut ex silice ignis: ex voluntate hominis nempe aliquantillum spiritus vitalis influentis desumitur, et id ipsum assumit idealem entitatem, tanquam formam ad complementum. Qua nacta perfectione, spiritus mediam sortem inter corpora et non corpora assumit. Mittitur autem eo, quo voluntas ipsum dirigit; idealis igitur entitas . . . nullis stringitur locorum, temporum aut dimensionum imperiis, ea nec dæmon est, nec ejus ullus effectus; sed spiritualis quædam est actio illius, nobis plane naturalis et vernacula.*—§ 168. *Ingens mysterium propalare hactenus distuli, ostendere videlicet, ad manum in homine sitam esse energiam, qua, solo nutu et phantasia sua, queat*

agere extra se et imprimere virtutem aliquam, influentiam deinceps perseverantem, et agentem in objectum longissime absens.

P. Pomponatius also says: *Sic contigit, tales esse homines, qui habeant ejusmodi vires in potentia, et per vim imaginativam et desiderativam cum actu operantur, talis virtus exit ad actum, et afficit sanguinem et spiritum, quæ per evaporationem petunt ad extra et producunt tales effectus.*[1]

Jane Leade, an English mystic visionary of Cromwell's time and pupil of Pordage, has given us some very curious disclosures of this kind. She is led to Magic in a very singular way. For, as the doctrine of their becoming one with the God of their religion is a fundamental characteristic of all Mystics, so is it with Jane Leade also. Now, with her however, the human will has its share in the omnipotence of the Divine will as a consequence of the two having become one, and accordingly acquires magic power. What other magicians therefore believe to be due to a compact with the Devil, she attributes to her becoming one with her God. Her Magic is therefore in the highest sense 'white Magic.' Besides, this alters nothing as to the practice and results. She is reserved and mysterious, as people had to be in those times; still it is easy to see that the thing is not a mere theoretical corollary, but that it has sprung from knowledge and experience obtained in another way.

It is in her "Revelation of Revelations"[2] that we find the chief passage; but the following one, which is rather an abridgment than a literal quotation and is contained in Horst's "Zauberbibliothek,"[3] comes from the same book: "Magic power enables its possessor to rule over and to renew the creation—*i.e.* the animal, vegetable and mineral kingdoms—so that, were *many* to co-operate in *one* magical power, Nature might be created anew as a paradise. . . . How is this magic power to be acquired? By renascence through faith: that is, by our *will* harmonizing with the divine *will*." For faith subjects the world to us, inasmuch as our own *will*, when it is in harmony with the divine *will*, results, as St. Paul tells us, in making everything submit to and obey us." Thus far Horst.—p. 131 of the "Revelation, &c.," Jane Leade shows that it was by the force of his will that Christ worked miracles, as, for instance, when he said to the leper: "I *will;* be thou clean." Sometimes however he left it to the will of those who, he saw, believed in him, saying to them: "'What *will* ye that I shall do unto you?' in which cases no less was done for them than they had desired in their will that the Lord should do. These words of our Saviour's are well deserving of notice, since the *highest Magia lies in the will*, so far as it is in union with the will of the Almighty: when these two wheels fit into each other, becoming in a sense *one*, they are, &c."—Again, p. 132, she says: "For what could resist that which is united with the will of God? The power of such a will is so great, that it always achieves its end. It is no *naked will* deprived of its clothing, or power; on the contrary, it brings with it an irresistible omnipotence, which enables it to uproot, to plant, to put to death and to bring to life, to bind and to loose, to heal and to injure, which power will be collected and concentrated in its entirety in the royal, free-born will. Of this power we shall attain knowledge, when we shall have been made one with the Holy Ghost, or when we shall be united in one spirit and being."—Again, p. 133: "We must quench or drown altogether the many multifarious wills which arise out of the mixed essence of souls, and they must lose themselves in the abysmal depth from which there will then arise and present itself the *virgin will*, which was never the slave of anything belonging to degenerate man; on the contrary, it stands in connection with the Almighty Power, quite free and pure, and will infallibly produce fruits and results quite similar to those of the divine will . . . wherefrom the burning oil of the Holy Ghost flows up in Magic, as it emits its fiery sparks."

---

[1] De incantationibus. Opera Basil. 1567, p. 44.

[2] German translation, Amsterdam, 1695, pp. 126 to 151, especially the pages headed "the power of calm will."

[3] Horst, "Zauberbibliothek" (Library of Magic), vol. i. p. 325.

Jacob Böhme too[1] speaks of Magic precisely in the sense here described. Among other things he says: "Magic is the mother of the essence of all beings: for it creates itself and is understood in *desire*. . . . . True Magic is not a being, but the *desiring spirit* of the being.—In fine: Magic is action in the *will's spirit*."

In corroboration, or at any rate in explanation, of the above view of the will as the real agent in magic, a curious and interesting anecdote, related by Campanella, from Avicenna, may here find its place.[2] "*Mulieres quædam condixerunt, ut irent animi gratia in viridarium. Una earum non ivit. Ceteræ colludentes arangium acceperunt et perforabant eum stilis acutis, dicentes: ita perforamus mulierem talem, quæ nobiscum venire detrectavit, et, projecto arangio intra fontem, abierunt. Postmodum mulierem illam dolentem invenerunt, quod se transfigi quasi clavis acutis sentiret, ab ea hora, qua arangium ceteræ perforarunt: et cruciata est valde donec arangii clavos extraxerunt imprecantes bona et salutem.*"

Krusenstern[3] gives a very curious and minute description of maleficent sorcery as practised, it is said successfully, by the priests of the savage tribes on the island of Nukahiva, the procedure in which is exactly similar to that of our cures by charms.—This fact is especially remarkable on account of the identity of the thing, notwithstanding the distance from all European tradition. With it ought to be compared Bende Bendsen's account of a headache he caused in another person by sorcery, through the medium of some of that person's hair which had been cut off. He concludes with the following words: "As far as I can learn, what is called witchcraft consists simply in preparing and applying noxious magnetic charms combined with a *maleficent influence of the will:* this is the detestable league with Satan."[1]

---

[1] J. Böhme, "Erklärung von sechs Punkten," under Punkt v.

[2] Campanella, "De sensu rerum et magia," l. iv. c. 18.

[3] Krusenstern's words are: "A universal belief in witchcraft, which is held to be very important by all islanders, seems to me to be connected with their religion; for they assert that the priests alone possess magic power, although some of the common people also, it is said, profess to have the secret, probably in order to make themselves feared, and to exact pre-

The agreement of all these writers, not only among themselves, but with the convictions to which Animal Magnetism has led in latter years, and finally even with what might be concluded from my speculative doctrine on this point, is surely a most remarkable phenomenon. This

---

sents. This sorcery, which they call *Kaha*, consists in inflicting a lingering death upon those to whom they bear a grudge, twenty days being however fixed as the term for this. They go to work as follows. Whoever wishes to practise revenge by means of sorcery, seeks to procure either saliva or urine or excrements of his enemy in some way or other. These he mixes with a powder, lays the compound in a bag which is woven in a special manner, and buries it. The most important secret is in the art of weaving the bag in the right way and of preparing the powder. As soon as it is buried, the effects show themselves in the person who is the object of this witchcraft. He sickens, becomes daily weaker, loses at last all his strength, and in twenty days is sure to die. If, on the other hand, he attempts to divert his enemy's revenge from himself by offering up a pig, or making some other valuable present in order to save his life, he may yet be saved, even on the nineteenth day, and no sooner is the bag unburied, than the attacks of illness cease. He recovers gradually, and after a few days is quite restored to health."—"Reise um die Welt." Ed. in 12mo, 1812, Part i., p. 249 *et seq.* [Add. to 3rd ed.]

[1] Kieser, "Archiv für thierischen Magnetismus," vol. ix. s. i. in the note, pp 128-132.

much is at any rate certain, that at the bottom of all the experiments, successful or unsuccessful, which have ever been made in Magic, there lies an anticipation of my Metaphysic. For in them is expressed the consciousness, that the causal law only connects phenomena, while the inner nature of things remains independent of it; and also, that if any *direct* influence on Nature be possible from within, it can only take place through the *will* itself. But even if Magic were to be ranked as practical Metaphysic, according to Bacon's classification, it is certain that no other theoretical Metaphysic would stand in the right relation to it but mine, by which the world is resolved into Will and Representation.

The zealous cruelty with which Magic has always been persecuted by the Church and to which the papal *malleus maleficarum* bears terrible evidence, seems not to have for its sole basis the criminal purposes often associated with the practice of Magic or the part assumed to be played by the Devil, but rather to proceed partly from a vague foreboding and fear lest Magic should trace back its original power to its true source; whereas the Church has assigned to it a place outside Nature.[1] The detestation shown by the cautious clergy of England towards Animal Magnetism [2] tends to confirm this supposition, and also the active zeal with which they oppose table-turning, which at any rate is harmless, yet which, for the same reason, has been violently assailed by the anathemas of the French, and even of the German, clergy.[1]

---

[1] They scent something of the

"Nos habitat, non tartara sed nec sidera cœli:
Spiritus in nobis qui viget, illa facit."
(Not in the heavens it lives, nor yet in hell;
The spirit that does it all, doth in us dwell.)

Compare Johann Beaumont, "Historisch-Physiologisch-und Theologischer Tractat von Geistern, Erscheinungen, Hexereyen und andern Zauber-Händeln, Halle im Magdeburgischen, 1721," p. 281. [Add. to 3rd ed.]

[2] Compare Parerga, vol. i. p. 257 (2nd ed. vol. i. p. 286).

---

[1] On the 4th of August, 1856, the Roman Inquisition issued a circular to all the bishops, in which it called upon them in the name of the Church to use their utmost influence against the practice of Animal Magnetism. The reasons for this are given with striking want of lucidity and great vagueness, and even here and there are not unmixed with falsehood; and it is easy to see that the Church is reluctant to own the real reason. This circular is published in the "Turin Journal" of December, 1856, and again in the French "Univers," and reprinted from this in the "Journal des Débats" of January 3rd, 1857. [Add. to 3rd ed.]

SINOLOGY.

NOTHING perhaps points more directly to a high degree of civilization in China than the almost incredible density of its population, now rated, according to Gützlaff, at 367 millions of inhabitants.[1] For whether we compare countries or ages, we find on the whole that civilization keeps pace with population.

The pertinacious zeal with which the Jesuit missionaries of the seventeenth and eighteenth centuries strove to inculcate their own relatively new doctrines into the minds of this very ancient nation, and their futile endeavours to discover early traces of their own faith in that country, left them no time for a profound study of the belief which prevails there. Therefore Europe has only lately obtained some slight knowledge of the religious state of the Chinese. We now know, that is to say, that in China there exists first of all a worship of Nature, which is universally professed, and dates from the earliest times, even, it is alleged, from before the discovery of fire, wherefore animals were sacrificed raw. The sacrifices offered up publicly at certain seasons or after great events by the Chinese Emperor and the chief dignitaries of the Empire, belong to this worship. These sacrifices are dedicated first and foremost to the blue sky and to the earth—to the blue sky in the winter solstice, to the earth in the summer solstice—and, after these, to every possible power of Nature: the sea, mountains, rivers, winds, thunder, rain, fire, &c. &c. A genius presides over each of these, and each genius has several temples. On the other hand, each genius presiding over every single province, town, village, or street, nay over family funerals and even sometimes over a merchant's warehouse, has also temples; only, in the two last cases they are destined exclusively for private worship. But public worship is besides offered up to former illustrious Emperors, founders of dynasties and to heroes, *i.e.* to all such as have benefited (Chinese) mankind by word or deed. Even these have their temples: Confucius alone having no less than 1,650 dedicated to him. This therefore accounts for the great number of small temples found throughout the Empire. With this hero-worship too, is associated the private worship offered up by every respectable family on the tombs of their ancestors.—Now besides this worship of Nature and of heroes, which is universal, there are three other prevailing religious doctrines in China, more with a dogmatical intent. First among these is the doctrine of Taossee, founded by Laotse, an older contemporary of Confucius. This is the doctrine of Reason, as the inner order of the Universe or inherent principle of all things, of the great One, the sublime Gable-Beam (Taiki) which supports all the Rafters, yet is above them (properly the all-pervading Soul of the World) and of Tao, *i.e.* the *Way*, namely to salvation: that is, to redemption from the world and its misery. We have an exposition of this doctrine taken from the fountain-head in

---

[1] According to a Chinese official Report on the census, printed in Pekin, and found by the English in the Chinese Governor's palace on entering Canton, China had 396 millions of inhabitants in 1852, and allowing for a constant increase, may now have 400 millions. ("Moniteur de la Flotte," end of May, 1857.)

The Reports of the Russian Clerical Mission in Pekin give the returns of 1842 as 414,687,000.

According to the tables published by the Russian Embassy at Pekin, the population, in 1849, amounted to 415 millions. ("Post-Zeitung," 1858.) [Add. to 3rd ed.]

Stanislas Julien's translation (1842) of Laotse's Taoteking, in which we find that the Tao-doctrine completely harmonizes with Buddhism both in meaning and in spirit. This sect however seems to have fallen very much into the background, and its teachers to be now looked down upon.—Secondly, we find the wisdom of Confucius, which has special attractions for Chinese *savants* and statesmen. Judging from translations, it is a rambling, commonplace, predominantly political, moral philosophy, without any metaphysical support, which has something peculiarly insipid and tiresome about it.—Finally, there exists for the bulk of the nation Buddha's sublime doctrine full of love. The name, or rather title, of Buddha in China is *Fo* or *Fhu*, whilst in Tartary the "Victoriously-Perfect" is more frequently called by his family-name, *Shakia-Muni*, and also *Burkhan-Bakshi;* in Birma and Ceylon, he is generally called *Gótama* or *Tagátata*, but his original name was Prince *Siddharta*.[1] This religion which, on account of its intrinsic excellence and truth, as well as of the great number of i followers, may be considered as ranking highest among a religions on earth, prevails throughout the greater part o Asia, and according to the latest investigator, Spence

---

[1] For the benefit of those who wish to acquire a fuller knowledge of Buddhism, I here note down those works belonging to its literature, and written in European languages, which I can really recommend, for I possess them and know them well; the omission of a few others, for instance of Hodgson's and A. Rémusat's books, is intentional.

1. "Dsanglun, or the Sage and the Fool," in Tibetan and German, by I. J. Schmidt, Petersburg, 1843, 2 vols. in 4to, contains in the preface to vol. i. (*i.e.* the Tibetan volume), from pp. xxxi to xxxviii, a very brief, but excellent, sketch of the whole doctrine, admirably calculated for a first introduction to the knowledge of it: the whole book even, as a part of the Kandshur (canonical books), may be recommended.—2. In the Memoranda of the Academy of St. Petersburg are to be found several lectures by the same excellent author (I. J. Schmidt), which were delivered in German in that Academy in 1829-1832. As they are of very great value for the knowledge of this religion, it is to be hoped that they will be collected and published all together in Germany. —3. By the same writer: "Forschungen über die Tibeter und Mongolen." Petersb. 1829, in 4to. (Investigations concerning the Tibetans and Mongols).—4. By the same writer: "Uber die Verwandtschaft der gnostisch-theosophischen Lehren mit dem Buddhaismus,"

1828. (On the relation between the Gnostic-Theosophic Doctrines and Buddhism.)—5. By the same: "Geschichte der Ost-Mongolen," Petersb. 1829. in 4to. (History of the Eastern Mongols.) [This is very instructive, especially the explanations and appendix, which give long extracts from writings on Religion, in which many passages clearly show the deep meaning and breathe the genuine spirit of Buddhism.—Add. to 3rd ed.] —6. Two treatises by Schiefner in German, in the "Mélanges Asiatiques tirés du Bulletin Historico-Philol. de l'Acad. d. St. Pétersburg," Tome 1, 1851.—7. "Samuel Turner's Journey to the Court of the Teshoo-Lama" (at the end), 1801.—8. Bochinger, "La Vie ascétique chez les Indous et les Bouddhistes," Strasbourg, 1831.—9. In the 7th vol. of the "Journal Asiatique," 1825, an extremely beautiful biography of Buddha by Deshauterayes.—10. Bournouf, "Introd. à l'Hist. d. Bouddhisme," vol. i. in 4to, 1844.—11. "Rgya Tsher Rolpa," traduit du Tibétain, par Foucaux, 1848, in 4to. This is the "Lalita Vistara," *i.e.* life of Buddha, the gospel of the Buddhists.—12. "Foe Koue Ki, relation des royaumes Bouddhiques," traduit du Chinois par Abel Rémusat, 1836, in 4to.—13. "Description du Tubet," traduit du Chinois en Russe par Bitchourin, et du Russe en Français par Klaproth, 1831.—14. Klaproth, "Fragments Bouddhiques," printed separately from the "Nouveau Journal Asiatique," Mars, 1831.—15. Spiegel, "De officiis sacerdotum Buddhicorum," Palice et Latine, 1841.—16. The same author's "Anecdota Palica," 1845.—[17. "Dhammapadam," palice edidet et latine vertit Fausböll, Hovniæ, 1855.—Add. to 3rd ed.]—18. Asiatic Researches, vol. vi. Buchanan, "On the Religion of the Burmas," and vol. xx. (Calcutta, 1839), Part 2, contains three important articles by Csoma Körösi, including Analyses of the Books of the Kandshur.—19. Sangermano, "The Burmese Empire," Rome, 1833.—20. Turnour, "The Mahawanzo," Ceylon, 1836.—21. Upham, "The Mahavansi, Raja Ratnacari et Rajavali," 3 vols. 1833.—22. *ejusd.* "Doctrine of Buddhism," 1839, fol.—23. Spence Hardy, "Eastern Monachism," 1850.—24. *ejusd.* "Manual of Buddhism," 1853. The two last books, written after a twenty years' stay in Ceylon and from oral information supplied by the priests there, have given me a deeper insight into the essence of the Buddhist dogma than any other work. They deserve to be translated into German, but without abridgement, for otherwise the best part might be left out.—[25. C. F. Köppen, "Die Religion des

Hardy, numbers 369 millions of believers: that is, far more than any other.—These three religions, the most widely diffused of which, Buddhism, subsists without any protection whatever from the State, by its own power alone—a circumstance which speaks greatly in its favour—are far from being hostile to one another, and exist quietly side by side, nay, harmonize even to a certain extent, perhaps by reciprocal influence, so that the sentence: "The three doctrines are only one", has become proverbial. The Emperor, as such, professes all three; still many of the Emperors, even up to the most recent times, have been especially devoted to Buddhism. This is shown by their profound respect for the *Dalai-Lama*, nay, even for the *Teshoo-Lama*, to whom they unhesitatingly yield precedence.—These three religions are neither monotheistic nor polytheistic, nor are they even pantheistic—Buddhism, at any rate, is not; since Buddha did not look upon a world sunk in sin and suffering, whose tenants, all subject to death, only subsist for a short time by devouring each other, as a manifestation of God. Moreover the word Pantheism, properly speaking, contains a contradiction; for it denotes a self-destroying conception, and has therefore never been understood otherwise than as a polite term of expression by those who know what seriousness means. It accordingly never entered into the heads of the clever, acute philosophers of the eighteenth century, not to take Spinoza for an Atheist, on account of his having called the world *Deus;* on the contrary, this discovery was reserved for the sham philosophers of our own times, who know nothing

Buddha," 1857, a complete compendium of Buddhism, compiled not only with great erudition and serious industry but also with intelligence and insight from all the other works I have mentioned above and from many more besides, which contains all that is essential on the subject.—26. "The Life of Buddha," from the Chinese of Palladji, in the "Archiv für wissenschaftliche Kunde von Russland," edited by Erman, vol. xv. Heft 1, 1856.—Add. to 3rd ed.]

but words: they even pique themselves on the achievement and accordingly talk about Acomism, the wags! But I would humbly suggest leaving their meanings to words—in short, calling the world, the world; and gods gods.

In their endeavours to acquire knowledge of the state of Religion in China, Europeans began as usual, and as the Greeks and Romans under similar circumstances had done, by first searching for points of contact with their own belief. Now as, in their own way of thinking, the conceptions of Religion and of Theism were almost identified, or at any rate had grown together so closely, that they could only be separated with great difficulty; as moreover, till a more accurate knowledge of Asia had reached Europe, the very erroneous opinion had been disseminated —for the purpose of argument *e consensu gentium*—that all nations on earth worship a single, or at any rate a highest, God, Creator of the Universe:[1] when they found themselves in a country where temples, priests and monasteries abounded, they started from the firm assumption that Theism would also be found there, though in some very unusual form. On seeing these expectations disappointed however, and on finding that the very conceptions of such things, let alone the words to express them, were unknown, it was but natural, considering the spirit in which their inquiries were made, that their first reports of these religions should refer rather to what they did not, than to what they did, contain. Besides, for many reasons, it can be no easy task for European heads to enter fully into the sense of these faiths. In the first place, they are brought up in Optimism, whereas in Asia, existence itself is looked upon as an evil and the world as a scene of misery, where it were better not to find oneself. Another reason is to be found in the decided Idealism which is essential to Buddhism and to Hindooism: a view only known in Europe as a paradox hardly worth a serious thought, advanced by certain eccentric philosophers; whereas in Asia it is even embodied in popular belief. For in Hindoostan it prevails universally as the doctrine of *Maja*, and in Thibet, the chief seat of the Buddhist Church, it is taught in an extremely popular way, a religious comedy being performed on occasions of special solemnity, in which the Dalaï-Lama is represented arguing with the Arch-fiend. The former defends Idealism, the latter Realism, and among other things the Devil says: "What is perceived through the five sources of all knowledge (the senses), is no deception, and what you teach is not true." After a long argumentation the matter is decided by a throw of the dice: the Realist (the Devil) loses, and is dismissed amid general jeering.[1] Keeping this fundamental difference in the whole way of thinking steadily in view, we shall find it not only excusable, but even natural, that in their investigation of the Asiatic religions Europeans should at first have stopped short at the negative standpoint; though, properly speaking, it has nothing to do with the matter. We therefore find a great deal referring to this negative stand-point which in no way advances our positive knowledge; it all however amounts to this: that Monotheism—an exclusively Jewish doctrine, to be sure—is alien to Buddhists and in general to the Chinese. For instance, in the "Lettres Édifiantes"[2] we find: "The Buddhists, whose views on the migration of souls are universally adopted, are accused of Atheism." In the "Asiatic Researches" (vol. vi. p. 255) we find: "The religion of the Birmans (Buddhism) shows them to be a nation far advanced beyond the barbarism of a wild state and greatly influenced by religious opinions, but which nevertheless has no knowledge of a Supreme Being, Creator and Preserver of the world. Yet the system of morality recommended in their fables is perhaps as good as any other taught by the religious doctrines which prevail among mankind.—And again, p. 258: "The followers of Gótama (*i.e.* of Buddha) are strictly speaking Atheists."—*Ibid.*, p. 258: "Gótama's sect consider the belief in a divine Being, Creator of the world, to be highly impious."—*Ibid.*, p. 268, Buchanan relates, that Atuli, the Zarado or High-Priest of the Buddhists at Ava, in an article upon his religion which he presented to a Catholic bishop, "counted the doctrine, that there is a Being who has created the world and all things in it and is alone worthy of adoration, among the six damnable heresies." Sangermano relates precisely the same thing,[1] and closes the list of the six grave heresies with the words: "The last of these impostors taught, that there is a Supreme Being, the Creator of the world and of all things in it, and that he alone is worthy of adoration." Colebrooke too says:[2] "The sects of Jaina and Buddha are really atheistic, for they acknowledge no Creator of the world, nor any Supreme ruling Providence."—I. J. Schmidt[3] likewise says: "The system of Buddhism knows no eternal, uncreated, single, divine Being, having existed before all Time, who has created all that is visible and invisible.

---

[1] This is equivalent to imputing to the Chinese the thought, that all princes on earth are tributary to their Emperor. [Add. to 3rd ed.]

---

[1] "Description du Tubet," traduite du Chinois en Russe par Bitchourin, et du Russe en Français par Klaproth, Paris, 1831, p. 65. Also in the "Asiatic Journal" new series, vol. i. p. 15. [Köppen, "Die Lamaische Hierarchie," p. 315.—Add. to 3rd ed.]

[2] "Lettres édifiantes," édit. de 1819, vol. viii. p. 46.

---

[1] "Description of the Burman Empire," Rome, 1833, p. 81.

[2] Colebrooke, "Transactions of the Royal Asiatic Society," vol. i.; "Essay on the Philosophy of the Hindoos," published also among his "Miscellaneous Essays," p. 236.

[3] "Investigations concerning the Tibetans and Mongols," p. 180.

This idea is quite foreign to Buddhism and there is not the slightest trace of it anywhere in Buddhistic books."—We find the learned sinologist Morrison too[1] not less desirous to discover traces of a God in the Chinese dogmas and ready to put the most favourable construction upon everything which seems to point in that direction; yet he is finally obliged to own that nothing of the kind can be clearly discovered. Where he explains the words *Thung* and *Tsing*, *i.e.* repose and movement, as that on which Chinese cosmogony is based, he renews this inquiry and concludes it with the words: "It is perhaps impossible to acquit this system of the accusation of Atheism."—And even recently Upham[2] says: "Buddhism presents to us a world without a moral ruler, guide or creator." The German sinologist Neumann too, says in his treatise[3] mentioned further on: "In China, where neither Mahometans nor Christians found a Chinese word to express the theological conception of the Deity. . . . . The words God, soul, spirit, as independent of Matter and ruling it arbitrarily, are utterly unknown in the Chinese language. . . . This range of ideas has become so completely one with the language itself, that the first verse of the book of Genesis cannot without considerable circumlocution be translated into genuine Chinese."—It was this very thing that led Sir George Staunton to publish a book in 1848 entitled: "An Inquiry into the proper mode of rendering the word God in translating the Sacred Scriptures into the Chinese language."[4]

---

[1] Morrison, "Chinese Dictionary," Macao, 1815, and following years, vol. i. p. 217.

[2] Upham, "History and Doctrine of Buddhism," London, 1829, p. 102.

[3] Neumann, "Die Natur-und Religions-Philosophie der Chinesen, nacn den Werken des Tchu-hi," pp. 10, 11.

[4] The following account given by an American sea-captain, who had come to Japan, is very amusing from the *naïveté* with which he assumes

My intention in giving the above quotations and explanations, is merely to prepare the way for the extremely remarkable passage, which it is the object of the present chapter to communicate, and to render that passage more intelligible to the reader by first making him realize the standpoint from which these investigations were made, and thus throwing light upon the relation between them and their subject. For Europeans, when investigating this matter in China in the way and in the spirit described, always inquiring for the supreme principle of all things, the power that rules the world, &c. &c., had often been referred to that which is designated by the word Tien (Engl. T'hëen). Now, the more usual meaning of this word is "Heaven," as Morrison also says in his dictionary; still it is a well-known thing that Tien is used in a figurative sense also, and then has a metaphysical signification. In the "Lettres Édifiantes"[1] we find the following explanation: "*Hing-tien* is the material, visible heaven; *Chin-tien* the spiritual and invisible heaven. Sonnerat too,[2] in his travels in East-India and China, says: "When the Jesuits disputed with the rest of the missionaries as to the meaning of the word Tien, whether it was Heaven or God, the

---

that mankind consists exclusively of Jews. For the "Times" of the 18th October, 1854, relates that an American ship, under command of Captain Burr, had arrived in Jeddo Bay, and gives his account of the favourable reception he met with there, at the end of which we find: "He likewise asserts the Japanese to be a nation of Atheists, denying the existence of a God and selecting as an object of worship either the spiritual Emperor at Meaco, or any other Japanese. He was told by the interpreters that formerly their religion was similar to that of China, but that the belief in a supreme Being has latterly been entirely discarded—(this is a mistake)—and he professed to be much shocked at Deejunoskee (a slightly Americanised Japanese), declaring his belief in the Deity. [Add. to 3rd ed.]

[1] Édition de, 1819, vol. xi. p. 461.

[2] Book iv. ch. i.

Chinese looked upon these foreigners as restless folk and drove them away to Macao." It was at any rate through this word that Europeans could first hope to find the track of that Analogy of Chinese Metaphysic with their own faith, which had been so persistently sought for; and it was doubtless owing to investigations of this kind that the results we find communicated in an Essay entitled "Chinese Theory of the Creation" were attained.[1] As to *Choo-foo-tze*, called also *Choo-hi*, who is mentioned in it, I observe that he lived in the twelfth century according to our chronology, and that he is the most celebrated of all the Chinese men of learning; because he has collected together all the wisdom of his predecessors and reduced it to a system. His work is in our days the basis of all Chinese instruction, and his authority of the greatest weight. In the passage I allude to, we find: "The word *Teen* would seem to denote 'the highest among the great' or 'above all what is great on earth:' but in practice its vagueness of signification is beyond all comparison greater, than that of the term *Heaven* in European languages. . . . Choo-foo-tze tells us that 'to affirm, that heaven has a *man* (*i.e.* a sapient being) there to judge and determine crimes, should not by any means be said; nor, on the other hand, must it be affirmed, that there is nothing at all to exercise a supreme control over these things.'

"The same author being asked about the *heart of heaven*, whether it was intelligent or not, answered: it must not be said that the mind of nature is unintelligent, but it does not resemble the cogitations of man. . . .

"According to one of their authorities, *Teen* is call'd ruler or sovereign (Choo), from the idea of the supreme control, and another expresses himself thus: 'Had heaven (Teen) no designing mind, then it must happen, that the cow might bring forth a horse, and on the peach-tree be produced the blossom of the pear.' On the other hand it is said, that *the mind of Heaven is deducible from what is the Will of mankind!*"

---

[1] To be found in the "Asiatic Journal," vol. xxii. anno 1826, pp. 41 and 42.

The agreement between this last sentence and my doctrine is so striking and so astonishing, that if this passage had not been printed full eight years after my own work had appeared, I should no doubt have been accused of having taken my fundamental thought from it. For there are three well-known modes of repelling the attack of new thoughts: firstly, by ignoring them, secondly by denying them, and lastly by asserting that they are not new, but were known long before. But the fact that my fundamental thought was formed quite independently of this Chinese authority, is firmly established by the reasons I have given; for I may hope to be believed when I affirm, that I am unacquainted with the Chinese language and consequently unable to derive thoughts for my own use from original Chinese sources unknown to others. On further investigation I have elicited the fact, that the passage I have quoted, was most probably, nay almost certainly, taken from Morrison's "Chinese Dictionary," where it may be found under the sign *Tëen:* only I have no opportunity of verifying it.[1]—In an article by Neumann[2] there are some passages which have evidently a common source with those here quoted from the "Asiatic Journal." But they are written with the vagueness of expression which is so frequent in Germany, and excludes clear comprehension. Besides, this translator of Choo-hi evidently did not himself quite understand the original; though by this no blame need be implied, when we consider the enormous difficulty of the Chinese language for Europeans, and the insufficiency of the means for studying it. Meanwhile it does not give us the enlightenment desired. We must therefore console ourselves with the hope, that as a freer intercourse with China has now been established, some Englishman may one day give us more minute and thorough information concerning the above-mentioned dogma, of which we have hitherto received such deplorably imperfect accounts.

---

[1] A note of Schopenhauer's referring to this says:—"According to letters from Doss" (a friend of S.'s), "dated 26th February and 8th June, 1857, the passages I have here quoted are to be found in Morrison's Chinese Dictionary, Macao, 1815, vol. i. p. 576, under 天 Tëen, although in a slightly different order, in nearly the same words. The important passage at the end alone differs and is as follows: 'Heaven makes the mind of mankind its mind: in most ancient discussions respecting Heaven, its mind, or will, was *divined* (it stands thus, and not *derived*) from what was the will of mankind.'—Neumann translated this passage for Doss, independently of Morrison's rendering, and the end was: 'Through the heart of the people Heaven is usually revealed.'" [*Editor's Note.*]

[2] Neumann, "Die Natur-und Religions-Philosophie der Chinesen,

nach dem Werke des Tschu-hi," an article in Illgen's "Periodical for Historical Theology," vol. vii. 1837, from pp. 60 to 63.

REFERENCE TO ETHICS.

FOR reasons I have stated in the beginning, confirmations of the rest of my doctrine are excluded from my present task. Still, in concluding, I may perhaps be allowed to make a general reference to Ethics.

From time immemorial, all nations have acknowledged that the world has a moral, as well as a physical, import. Everywhere nevertheless the matter was only brought to an indistinct consciousness, which, in seeking for its adequate expression, has clothed itself in various images and myths. These are the different Religions. Philosophers, on their side, have at all times endeavoured to attain clear comprehension of the thing and, notwithstanding their differences in other respects, all, excepting the strictly materialistic, philosophical systems, agree in this one point: that what is most important, nay, alone essential, in our whole existence, that on which everything depends, the real meaning, pivot or point (*sit venia verbo*) of it, lies in the morality of human actions. But as to the sense of this, as to the ways and means, as to the possibility of the thing, they all again quite disagree, and find themselves before an abyss of obscurity. Thus it follows, that it is easy to preach, but difficult to found, morality. It is just because that point is determined by our conscience, that it becomes the touchstone of all systems; since we demand, and rightly demand, that Metaphysic should give support to Ethics: and now arises the difficult problem to show that, contrary to all experience, the physical order of things depends upon a moral one, and to find out a connection between the force which, by acting according to eternal laws of Nature, gives the world stability, and the morality which has its seat in the human breast. This is therefore the rock on which the best thinkers have foundered. Spinoza occasionally tacks a moral theory on to his Pantheistic Fatalism by means of sophisms, but more often leaves morality terribly in the lurch. Kant, when theoretical Reason is exhausted, sends his Categorical Imperative, laboriously worked out of mere conceptions,[1] on the stage, as *deus ex machina,* with an absolute *ought.* But the mistake he made by it only became quite clear when Fichte, who always took outbidding for outdoing, had spun it out with Christian Wolfian prolixity and wearisomeness to a complete system of *moral fatalism* in his "System of Moral Doctrine," and subsequently presented it more briefly in his last pamphlet.[2]

Now, from this point of view, a system which places the reality of all existence and the root of the whole of Nature in *the Will,* and in this will places the root of the world, must undeniably carry with it, to say the least, a strong prejudice in its favour. For, by a direct and simple way, it reaches, nay, already holds in its hand before coming to Ethics, what other systems try to reach by roundabout, ever dubious by-paths. Nor indeed can any other road ever lead to this but the insight, that the active and impulsive force in Nature which presents this perceptible world to our intellect, is identical with the will within us. The only Metaphysic which really and immediately supports Ethics, is that one which is itself primarily ethical and constituted out of the material of Ethics. Therefore I had a far greater right to call my

---

[1] See my prize-essay "On the Fundament of Morality," § 6.

[2] "Die Wissenschaftslehre in allgemeinen Umrisse" (The Doctrine of Science in a general outline), 18, 10.

Metaphysic "Ethics," than Spinoza, with whom the word sounds almost like irony, and whose "Ethics" might be said to bear the name like *lucus a non lucendo;* since it is only by means of sophistry that he has been able to tack his morality on to a system, from which it would never logically proceed. In general, moreover, he disavows it downright with revolting assurance.[1] On the whole, I can confidently assert, that there has never yet been a philosophical system so entirely cut out of one piece, so completely without any joins or patches, as mine. As I have said in my preface, it is the unfolding of a single thought, by which the ancient *ἁπλοῦς ὁ μῦθος τῆς ἀληθείας ἔφυ*[2] is again confirmed. Then we must still take into consideration here, that freedom and responsibility—those pillars on which all morality rests—can certainly be asserted in words without the assumption of the aseity[3] of the will; but that it is absolutely impossible to think them without it. Whoever wishes to dispute this, must first invalidate the axiom, stated long ago by the Schoolmen: *operari sequitur esse* (*i.e.* the acts of each being follow from the nature of that being), or we must demonstrate the fallacy of the inference to be drawn from it: *unde esse, inde operari.* Responsibility has for its condition freedom; but freedom has for its condition primariness. For I *will* according to what I *am;* therefore I must *be* according to what I *will.* Aseity of the will is therefore the first condition of any Ethics based on serious thought, and Spinoza is right when he says: *Ea res libera dicetur, quæ ex sola suæ naturæ necessitate existit, et a se sola ad agendum determinatur.*[4] Dependence, as to existence and nature, united with freedom as to action, is a contradiction. Were Prometheus to call the creatures of his making to account for their actions, they would be quite justified in answering: "We could only act according to our being: for actions arise from nature. If our actions were bad, the fault lay in our nature: this is thine own work; punish thyself."[1] And it is just the same with the imperishableness of our true being in death; for this cannot be seriously thought without the aseity of that being, and can even hardly be conceived without a fundamental separation of the will from the intellect. This last point is peculiar to my philosophy; but Aristotle had already proved the first thoroughly, by showing at length how that alone can be imperishable which has not arisen, and that the two conceptions condition each other:[2] Ταῦτα ἀλλήλοις ἀκολουθεῖ, καὶ τὸ τε ἀγένητον ἄφθαρτον, καὶ τὸ ἄφθαρτον ἀγένητον. . . . τὸ γὰρ γενητὸν καὶ τὸ φθαρτὸν ἀκολουθοῦσιν ἀλλήλοις.—εἰ γενητόν τι, φθαρτὸν ἀνάγκη[3] (*hæc mutuo se sequuntur, atque ingenerabile est incorruptibile, et incorruptibile ingenerabile. . . . generabile enim et corruptibile mutuo se sequuntur.—si generabile est, et corruptibile esse necesse est*). All those among the ancient philosophers who taught an immortality of the soul, understood it in this way; nor did it enter into the head of any of them to assign infinite permanence to a being *having arisen* in any way. We have evidence of the embarrassment to which the contrary assumption leads, in the ecclesiastical controversy between the advocates of Pre-existence, Creation and Traduction.

---

[1] For instance, "Eth." iv. prop. 37, Schol. 2.

[2] The language of truth is simple. [Tr.'s add.]

[3] Self-existence; self-dependence.

[4] "Eth." i. def. 7. [Tr.]

The Optimism moreover of all philosophical systems is a point closely allied to Ethics which must never fail in any of them, as in duty bound: for the world likes to hear that it is commendable and excellent, and philosophers like to please the world. With me it is different: I have seen what pleases the world, and therefore shall not swerve a step from the path of truth in order to please it. Thus in this point also my system varies from all the others and stands by itself. But when all the others have completed their demonstrations to the song of the best of worlds, quite at the last, at the background of the system, like a tardy avenger of the monster, like a spirit from the tomb, like the statue in Don Juan, there comes the question as to the origin of evil, of the monstrous, nameless evil, of the awful, heartrending misery in the world:—and here they are speechless, or can only find words, empty, sonorous words, with which to settle this heavy reckoning. On the other hand, a system, in whose basis already the existence of evil is interwoven with the existence of the world, need not fear that apparition any more than a vaccinated child need fear the smallpox. Now this is the case when freedom is placed in the *esse* instead of in the *operari* and sin, evil and the world then proceed from that *esse*.—Moreover it is fair to let me, as a serious man, only speak of things which I really know and only make use of words to which I attach a quite definite meaning; since this alone can be communicated with security to others, and Vauvenargues is quite right in saying: "*la clarté est la bonne foi des philosophes.*" Therefore if I use the words 'Will, Will to live,' this is no mere *ens rationis*, no hypostasis set up by me, nor is it a term of vague, uncertain meaning; on the contrary, I refer him, who asks what it is, to his own inner self, where he will find it entire, nay, in colossal dimensions, as a true *ens realissimum*. I have accordingly not explained the world out of the unknown, but rather out of that which is better known than anything, and known to us moreover in quite a different way from all the rest. As to the paradoxical character finally, with which the ascetic results of my Ethics have been reproached, these results had given umbrage even to Jean Paul, otherwise so favourably disposed towards me, and had induced Herr Rätze also (not knowing that the only course to be adopted against me was silence) to write a book against me in 1820, with the best intentions. They have since become the standing rock of offence in my philosophy; but I beg my readers to take into consideration, that it is only in this north-western portion of the ancient continent, and even here only in Protestant countries, that the term paradoxical can be applied to such things; whereas throughout the whole of vast Asia—everywhere indeed, where the detestable doctrine of Islam has not prevailed over the ancient and profound Religions of mankind by dint of fire and sword—they would rather have to fear the reproach of being commonplace. I console myself therefore with the thought that, when referred to the Upanishads of the Sacred Vedas, my Ethics are quite orthodox,[1] and that even with primitive, genuine Christianity they stand in no contradiction. As to all other accusations of heresy, I am well armoured and my breast is fortified with triple steel.

---

[1] Compare "Parerga," i. p. 115, *et seqq.* (p. 133 of 2nd ed.).

[2] Aristot. "De Cœlo," i. 12.

[3] "These two go together, the uncreated is imperishable, and the imperishable is uncreated. . . . For the created and the perishable go together. . . . If a thing is created it is necessarily perishable." [Tr.]

---

[1] I refer those who may wish to be briefly, yet thoroughly, informed on this point, to the late Pasteur Bochinger's work: "La vie contemplative, ascétique et monastique chez lez peuples Bouddhistes," Strasbourg, 1831.

CONCLUSION.

THE undoubtedly striking confirmations recorded in this treatise, which have been contributed to my doctrine by the Empirical Sciences since its first appearance, but independently of it, will unquestionably have been followed by many more: for how small is the portion which the individual can find time, opportunity and patience to become acquainted with, of the branch of literature dedicated to Natural Science which is so actively cultivated in all languages! Even what I have here mentioned however, inspires me with confidence that the time for my philosophy is ripening; and it is with heartfelt joy that I see the Empirical Sciences gradually come forward in the course of time, as witnesses above suspicion, to testify to the truth of a doctrine, concerning which a politic, inviolable silence has been maintained for seventeen years by our "philosophers by profession" (some of them give themselves this characteristic name, nay even that of "philosophers by trade"); so that it had been left to Jean Paul, who was ignorant of their tactics, to draw attention to it. For it may have appeared to them a delicate matter to praise it, and, on due consideration, they may have thought it not altogether safe to blame it either, and may have judged it unnecessary besides to show the public, as belonging neither to the profession nor to the trade, that it is quite possible to philosophize very seriously without being either unintelligible or wearisome. Why compromise themselves therefore with it, since no one betrays himself by silence and the favourite secretive method was ready at hand, the approved specific against merit; this much was besides soon agreed upon: that, considering the circumstances of the times, my philosophy did not possess the right qualifications for being taught professionally. Now the true, ultimate aim of all philosophy, with them, is to be taught professionally,—so much and so truly is it so, that were Truth to come down stark naked from lofty Olympus, but were what she brought with her not found to correspond to the requirements called for by the circumstances of the times, or to the purposes of their mighty superiors, these gentlemen "of the profession and trade" would verily waste no time with the indecent nymph, but would hasten to bow her out again to her Olympus, then place three fingers on their lips and return quietly to their compendia. For assuredly he who makes love to this nude beauty, to this fascinating syren, to this portionless bride, will have to forego the good fortune of becoming a Government and University professor. He may even congratulate himself if he becomes a garret-philosopher. On the other hand, his audience will consist, not of hungry undergraduates anxious to turn their learning to account, but rather of those rare, select thinkers, thinly sprinkled among the countless multitude, who arise from time to time, almost as a freak of Nature. And a grateful posterity is beckoning from afar. But they can have no idea of the beauty and loveliness of Truth, of the delight there is in pursuing her track, of the rapture in possessing her, who can imagine that anyone who has once looked her in the face can ever desert, deny, or distort her for the sake of the venal approval, of the offices, of the money or the titles of such people. Better to grind spectacle-glasses like Spinoza or draw water like Cleanthes. Henceforth they may take whatever course they like: Truth will not change her nature to accommodate "the trade." Serious philosophy has now really outgrown Universities, where Science stands under State-guardianship. It may however some day perhaps come to be counted among the occult sciences; while the spurious kind, that *ancilla theologiæ* in Universities, that inferior counterfeit of Scholasticism, for which the highest criterion of philosophical truth lies in the country catechism, will make our Lecture-halls doubly re-echo.—"You, that way: we, this way."—[1]

---

[1] Shakespeare, "Love's Labour's Lost."

CHISWICK PRESS:—C. WHITTINGHAM AND CO., TOOKS COURT,
CHANCERY LANE.

AN

ALPHABETICAL LIST

OF BOOKS CONTAINED IN

BOHN'S LIBRARIES.

Detailed Catalogue, arranged according to the various Libraries, will be sent on application.

ADDISON'S Works. With the Notes of Bishop Hurd, Portrait, and 8 Plates of Medals and Coins. Edited by H. G. Bohn. 6 vols. 3*s.* 6*d.* each.

ÆSCHYLUS, The Dramas of. Translated into English Verse by Anna Swanwick. 4th Edition, revised. 5*s.*

—— **The Tragedies of.** Translated into Prose by T. A. Buckley, B.A. 3*s.* 6*d.*

ALLEN'S (Joseph, R. N.) Battles of the British Navy. Revised Edition, with 57 Steel Engravings. 2 vols. 5*s.* each.

AMMIANUS MARCELLINUS. History of Rome during the Reigns of Constantius, Julian, Jovianus, Valentinian, and Valens. Translated by Prof. C. D. Yonge, M.A. 7*s.* 6*d.*

ANDERSEN'S Danish Legends and Fairy Tales. Translated by Caroline Peachey. With 120 Wood Engravings. 5*s.*

ANTONINUS (M. Aurelius), The Thoughts of. Trans. literally, with Notes and Introduction by George Long, M.A. 3*s.* 6*d.*

APOLLONIUS RHODIUS. 'The Argonautica.' Translated by E. P. Coleridge, B.A. 5*s.*

APPIAN'S Roman History. Translated by Horace White, M.A., LL.D. With Maps and Illustrations. 2 vols. 6*s.* each.

APULEIUS, The Works of Comprising the Golden Ass, God of Socrates, Florida, and Discourse of Magic. 5*s.*

ARIOSTO'S Orlando Furioso. Translated into English Verse by W. S. Rose. With Portrait, and 24 Steel Engravings. 2 vols. 5*s.* each.

ARISTOPHANES' Comedies. Translated by W. J. Hickie. 2 vols. 5*s.* each.

ARISTOTLE'S Nicomachean Ethics. Translated, with Introduction and Notes, by the Venerable Archdeacon Browne. 5*s.*

—— **Politics and Economics.** Translated by E. Walford, M.A., with Introduction by Dr. Gillies. 5*s.*

ARISTOTLE'S Metaphysics. Translated by the Rev. John H. M'Mahon, M.A. 5*s.*

—— **History of Animals.** Trans. by Richard Cresswell, M.A. 5*s.*

—— **Organon**; or, Logical Treatises, and the Introduction of Porphyry. Translated by the Rev. O. F. Owen, M.A. 2 vols. 3*s.* 6*d.* each.

—— **Rhetoric and Poetics.** Trans. by T. Buckley, B.A. 5*s.*

ARRIAN'S Anabasis of Alexander, together with the **Indica.** Translated by E. J. Chinnock, M.A., LL.D. With Maps and Plans. 5*s.*

ATHENÆUS. The Deipnosophists; or, the Banquet of the Learned. Trans. by Prof. C. D. Yonge, M.A. 3 vols. 5*s.* each.

BACON'S Moral and Historical Works, including the Essays, Apophthegms, Wisdom of the Ancients, New Atlantis, Henry VII., Henry VIII., Elizabeth, Henry Prince of Wales, History of Great Britain, Julius Cæsar, and Augustus Cæsar. Edited by J. Devey, M.A. 3*s.* 6*d.*

—— **Novum Organum and Advancement of Learning.** Edited by J. Devey, M.A. 5*s.*

BASS'S Lexicon to the Greek Testament. 2*s.*

BAX'S Manual of the History of Philosophy. for the use of Students. By E. Belfort Bax. 5*s.*

BEAUMONT and FLETCHER, their finest Scenes, Lyrics, and other Beauties, selected from the whole of their works, and edited by Leigh Hunt. 3*s.* 6*d.*

BECHSTEIN'S Cage and Chamber Birds, their Natural History, Habits, Food, Diseases, and Modes of Capture. Translated, with considerable additions on Structure, Migration, and Economy, by H. G. Adams. Together with SWEET BRITISH WARBLERS. With 43 coloured Plates and Woodcut Illustrations. 5*s.*

BEDE'S (Venerable) Ecclesiastical History of England. Together with the ANGLO-SAXON CHRONICLE. Edited by J. A. Giles, D.C.L. With Map. 5*s.*

BELL (Sir Charles). The Anatomy and Philosophy of Expression, as connected with the Fine Arts. By Sir Charles Bell, K.H. 7th edition, revised. 5*s.*

BERKELEY (George), Bishop of Cloyne, The Works of. Edited by George Sampson. With Biographical Introduction by the Right Hon. A. J. Balfour, M.P. 3 vols. 5*s.* each.

BION. *See* THEOCRITUS.

BJÖRNSON'S Arne and the Fisher Lassie. Translated by W. H. Low, M.A. 3*s.* 6*d.*

BLAIR'S Chronological Tables Revised and Enlarged. Comprehending the Chronology and History of the World, from the Earliest Times to the Russian Treaty of Peace, April 1856. By J. Willoughby Rosse. Double vol. 10*s.*

—— **Index of Dates.** Comprehending the principal Facts in the Chronology and History of the World, alphabetically arranged; being a complete Index to Blair's Chronological Tables. By J. W. Rosse. 2 vols. 5*s.* each.

BLEEK, Introduction to the Old Testament. By Friedrich Bleek. Edited by Johann Bleek and Adolf Kamphausen. Translated by G. H. Venables, under the supervision of the Rev. Canon Venables. 2 vols. 5*s.* each.

BOETHIUS'S Consolation of Philosophy. King Alfred's Anglo-Saxon Version of. With a literal English Translation on opposite pages, Notes, Introduction, and Glossary, by Rev. S. Fox, M.A. 5*s.*

BOHN'S Dictionary of Poetical Quotations. 4th edition. 6*s.*

BOHN'S Handbooks of Games. New edition. In 2 vols., with numerous Illustrations 3*s.* 6*d.* each.

Vol. I.—TABLE GAMES:—Billiards, Chess, Draughts, Backgammon, Dominoes, Solitaire, Reversi, Go-Bang, Rouge et Noir, Roulette, E.O., Hazard, Faro.

Vol. II. — CARD GAMES: — Whist, Solo Whist, Poker, Piquet, Ecarté, Euchre, Bézique, Cribbage, Loo, Vingt-et-un, Napoleon, Newmarket, Pope Joan, Speculation, &c., &c.

BOND'S A Handy Book of Rules and Tables for verifying Dates with the Christian Era, &c. Giving an account of the Chief Eras and Systems used by various Nations; with the easy Methods for determining the Corresponding Dates. By J. J. Bond. 5*s.*

BONOMI'S Nineveh and its Palaces. 7 Plates and 294 Woodcut Illustrations. 5*s.*

BOSWELL'S Life of Johnson, with the TOUR IN THE HEBRIDES and JOHNSONIANA. Edited by the Rev. A. Napier, M.A. With Frontispiece to each vol. 6 vols. 3*s.* 6*d.* each.

BRAND'S Popular Antiquities of England, Scotland, and Ireland. Arranged, revised, and greatly enlarged, by Sir Henry Ellis, K.H., F.R.S., &c., &c. 3 vols. 5*s.* each.

BREMER'S (Frederika) Works. Translated by Mary Howitt. 4 vols. 3*s.* 6*d.* each.

BRIDGWATER TREATISES.

Bell (Sir Charles) on the Hand. With numerous Woodcuts. 5*s.*

Kirby on the History, Habits, and Instincts of Animals. Edited by T. Rymer Jones. With upwards of 100 Woodcuts. 2 vols. 5*s.* each.

Kidd on the Adaptation of External Nature to the Physical Condition of Man. 3*s.* 6*d.*

Chalmers on the Adaptation of External Nature to the Moral and Intellectual Constitution of Man. 5*s.*

BRINK (B. ten) Early English Literature. By Bernhard ten Brink. Vol. I. To Wyclif. Translated by Horace M. Kennedy 3*s.* 6*d.*

Vol. II. Wyclif, Chaucer, Earliest Drama Renaissance. Translated by W. Clarke Robinson, Ph.D. 3*s.* 6*d.*

Vol. III. From the Fourteenth Century to the Death of Surrey. Edited by Dr. Alois Brandl. Trans. by L. Dora Schmitz. 3*s.* 6*d.*

—— Five Lectures on Shakespeare. Trans. by Julia Franklin. 3*s.* 6*d.*

BROWNE'S (Sir Thomas) Works Edited by Simon Wilkin. 3 vols. 3*s.* 6*d*, each.

BURKE'S Works. 8 vols. 3*s.* 6*d.* each.

I.—Vindication of Natural Society—Essay on the Sublime and Beautiful, and various Political Miscellanies.

II.—Reflections on the French Revolution — Letters relating to the Bristol Election — Speech on Fox's East India Bill, &c.

III.—Appeal from the New to the Old Whigs—On the Nabob of Arcot's Debts—The Catholic Claims, &c.

IV.—Report on the Affairs of India, and Articles of Charge against Warren Hastings.

V.—Conclusion of the Articles of Charge against Warren Hastings—Political Letters on the American War, on a Regicide Peace, to the Empress of Russia.

VI.—Miscellaneous Speeches—Letters and Fragments—Abridgments of English History, &c. With a General Index.

VII. & VIII.—Speeches on the Impeachment of Warren Hastings; and Letters. With Index. 2 vols. 3*s.* 6*d.* each.

—— **Life.** By Sir J. Prior. 3*s.* 6*d.*

BURNEY'S Evelina. By Frances Burney (Mme. D'Arblay). With an Introduction and Notes by A. R. Ellis. 3*s.* 6*d.*

—— **Cecilia.** With an Introduction and Notes by A. R. Ellis. 2 vols. 3*s.* 6*d.* each.

BURN (R.) Ancient Rome and its Neighbourhood. An Illustrated Handbook to the Ruins in the City and the Campagna, for the use of Travellers. By Robert Burn, M.A. With numerous Illustrations, Maps, and Plans. 7*s.* 6*d.*

BURNS (Robert), Life of. By J. G. Lockhart, D.C.L. A new and enlarged Edition. Revised by William Scott Douglas. 3*s.* 6*d.*

BURTON'S (Robert) Anatomy of Melancholy. Edited by the Rev. A. R. Shilleto, M.A. With Introduction by A. H. Bullen, and full Index. 3 vols. 3*s.* 6*d.* each.

BURTON (Sir R. F.) Personal Narrative of a Pilgrimage to Al-Madinah and Meccah. By Captain Sir Richard F. Burton, K.C.M.G. With an Introduction by Stanley Lane-Poole, and all the original Illustrations. 2 vols. 3*s.* 6*d.* each.

⁂ This is the copyright edition, containing the author's latest notes.

BUTLER'S (Bishop) Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature; together with two Dissertations on Personal Identity and on the Nature of Virtue, and Fifteen Sermons. 3*s.* 6*d.*

BUTLER'S (Samuel) Hudibras. With Variorum Notes, a Biography, Portrait, and 28 Illustrations. 5*s.*

—— or, further Illustrated with 60 Outline Portraits. 2 vols. 5*s.* each.

CÆSAR. Commentaries on the Gallic and Civil Wars. Translated by W. A. McDevitte, B.A. 5*s.*

CAMOENS' Lusiad; or, the Discovery of India. An Epic Poem. Translated by W. J. Mickle. 5th Edition, revised by E. R. Hodges, M.C.P. 3*s.* 6*d.*

CARAFAS (The) of Maddaloni. Naples under Spanish Dominion. Translated from the German of Alfred de Reumont. 3*s.* 6*d.*

CARLYLE'S French Revolution. Edited by J. Holland Rose, Litt.D. Illus. 3 vols. 5*s.* each.

—— **Sartor Resartus.** With 75 Illustrations by Edmund J. Sullivan. 5*s.*

CARPENTER'S (Dr. W. B.) Zoology. Revised Edition, by W. S. Dallas, F.L.S. With very numerous Woodcuts. Vol. I. 6*s.* [*Vol. II. out of print.*

CARPENTER'S Mechanical Philosophy, Astronomy and Horology. 181 Woodcuts. 5*s.*

—— **Vegetable Physiology and Systematic Botany.** Revised Edition, by E. Lankester M.D., &c. With very numerous Woodcuts. 6*s.*

—— **Animal Physiology.** Revised Edition. With upwards of 300 Woodcuts. 6*s.*

CASTLE (E.) Schools and Masters of Fence, from the Middle Ages to the End of the Eighteenth Century. By Egerton Castle, M.A., F.S.A. With a Complete Bibliography. Illustrated with 140 Reproductions of Old Engravings and 6 Plates of Swords, showing 114 Examples. 6*s.*

CATTERMOLE'S Evenings at Haddon Hall. With 24 Engravings on Steel from designs by Cattermole, the Letterpress by the Baroness de Carabella. 5*s.*

CATULLUS, Tibullus, and the Vigil of Venus. A Literal Prose Translation. 5*s.*

CELLINI (Benvenuto). Memoirs of, written by Himself. Translated by Thomas Roscoe. 3*s.* 6*d.*

CERVANTES' Don Quixote de la Mancha. Motteaux's Translation revised. 2 vols. 3*s.* 6*d.* each.

—— **Galatea.** A Pastoral Romance. Translated by G. W. J. Gyll. 3*s.* 6*d.*

—— **Exemplary Novels.** Translated by Walter K. Kelly. 3*s.* 6*d.*

CHAUCER'S Poetical Works. Edited by Robert Bell. Revised Edition, with a Preliminary Essay by Prof. W. W. Skeat, M.A. 4 vols. 3*s.* 6*d.* each.

CHESS CONGRESS of 1862. A Collection of the Games played. Edited by J. Löwenthal. 5*s.*

CHEVREUL on Colour. Translated from the French by Charles Martel. Third Edition, with Plates, 5*s.*; or with an additional series of 16 Plates in Colours, 7*s.* 6*d.*

CHILLINGWORTH'S Religion of Protestants. A Safe Way to Salvation. 3*s.* 6*d.*

CHINA, Pictorial, Descriptive, and Historical. With Map and nearly 100 Illustrations. 5*s.*

CHRONICLES OF THE CRUSADES. Contemporary Narratives of the Crusade of Richard Cœur de Lion, by Richard of Devizes and Geoffrey de Vinsauf; and of the Crusade at St. Louis, by Lord John de Joinville. 5*s.*

CICERO'S Orations. Translated by Prof. C. D. Yonge, M.A. 4 vols. 5*s.* each.

CICERO'S Letters. Translated by Evelyn S. Shuckburgh. 4 vols. 5*s.* each.

—— **On Oratory and Orators.** With Letters to Quintus and Brutus. Translated by the Rev. J. S. Watson, M.A. 5*s.*

—— **On the Nature of the Gods,** Divination, Fate, Laws, a Republic, Consulship. Translated by Prof. C. D. Yonge, M.A., and Francis Barham. 5*s.*

—— **Academics,** De Finibus, and Tusculan Questions. By Prof. C. D. Yonge, M.A. 5*s.*

—— **Offices**; or, Moral Duties. Cato Major, an Essay on Old Age; Lælius, an Essay on Friendship; Scipio's Dream; Paradoxes; Letter to Quintus on Magistrates. Translated by C. R. Edmonds. 3*s.* 6*d.*

CORNELIUS NEPOS.—*See* JUSTIN.

CLARK'S (Hugh) Introduction to Heraldry. 18th Edition, Revised and Enlarged by J. R. Planché, Rouge Croix. With nearly 1000 Illustrations. 5*s.* Or with the Illustrations Coloured, 15*s.*

CLASSIC TALES, containing Rasselas, Vicar of Wakefield, Gulliver's Travels, and The Sentimental Journey. 3*s.* 6*d.*

COLERIDGE'S (S. T.) Friend. A Series of Essays on Morals, Politics, and Religion. 3*s.* 6*d.*

—— **Aids to Reflection,** and the CONFESSIONS OF AN INQUIRING SPIRIT, to which are added the ESSAYS ON FAITH and the BOOK OF COMMON PRAYER. 3*s.* 6*d.*

—— **Lectures and Notes on Shakespeare and other English Poets.** Edited by T. Ashe. 3*s.* 6*d.*

COLERIDGE'S Biographia Literaria; together with Two Lay Sermons. 3*s.* 6*d.*

—— **Table-Talk and Omniana.** Edited by T. Ashe, B.A. 3*s.* 6*d.*

—— **Miscellanies, Æsthetic and Literary;** to which is added, THE THEORY OF LIFE. Collected and arranged by T. Ashe, B.A. 3*s.* 6*d.*

COMTE'S Positive Philosophy. Translated and condensed by Harriet Martineau. With Introduction by Frederic Harrison. 3 vols. 5*s.* each.

COMTE'S Philosophy of the Sciences, being an Exposition of the Principles of the *Cours de Philosophie Positive.* By G. H. Lewes. 5*s.*

CONDÉ'S History of the Dominion of the Arabs in Spain. Translated by Mrs. Foster. 3 vols. 3*s.* 6*d.* each.

COOPER'S Biographical Dictionary. Containing Concise Notices (upwards of 15,000) of Eminent Persons of all Ages and Countries. By Thompson Cooper, F.S.A. With a Supplement, bringing the work down to 1883. 2 vols. 5*s.* each.

COXE'S Memoirs of the Duke of Marlborough. With his original Correspondence. By W. Coxe, M.A., F.R.S. Revised edition by John Wade. 3 vols. 3*s.* 6*d.* each.

⁂ An Atlas of the plans of Marlborough's campaigns, 4to. 10*s.* 6*d.*

—— **History of the House of Austria** (1218-1792). With a Continuation from the Accession of Francis I. to the Revolution of 1848. 4 vols. 3*s.* 6*d.* each.

CRAIK'S (G. L.) Pursuit of Knowledge under Difficulties. Illustrated by Anecdotes and Memoirs. Revised edition, with numerous Woodcut Portraits and Plates. 5*s.*

CRUIKSHANK'S Punch and Judy. The Dialogue of the Puppet Show; an Account of its Origin, &c. With 24 Illustrations, and Coloured Plates, designed and engraved by G. Cruikshank. 5*s.*

CUNNINGHAM'S Lives of the Most Eminent British Painters. A New Edition, with Notes and Sixteen fresh Lives. By Mrs. Heaton. 3 vols. 3*s.* 6*d.* each.

DANTE. Divine Comedy. Translated by the Rev. H. F. Cary, M.A. 3*s.* 6*d.*

—— Translated into English Verse by I. C. Wright, M.A. 3rd Edition, revised. With Portrait, and 34 Illustrations on Steel, after Flaxman.

DANTE. The Inferno. A Literal Prose Translation, with the Text of the Original printed on the same page. By John A. Carlyle, M.D. 5*s.*

—— **The Purgatorio.** A Literal Prose Translation, with the Text printed on the same page. By W. S. Dugdale. 5*s.*

DE COMMINES (Philip), Memoirs of. Containing the Histories of Louis XI. and Charles VIII., Kings of France, and Charles the Bold, Duke of Burgundy. Together with the Scandalous Chronicle, or Secret History of Louis XI., by Jean de Troyes. Translated by Andrew R. Scoble. With Portraits. 2 vols. 3*s.* 6*d.* each.

DEFOE'S Novels and Miscellaneous Works. With Prefaces and Notes, including those attributed to Sir W. Scott. 7 vols. 3*s.* 6*d.* each.

- I.—Captain Singleton, and Colonel Jack.
- II.—Memoirs of a Cavalier, Captain Carleton, Dickory Cronke, &c.
- III.—Moll Flanders, and the History of the Devil.
- IV.—Roxana, and Life of Mrs. Christian Davies.
- V.—History of the Great Plague of London, 1665; The Storm (1703); and the True-born Englishman.
- VI.—Duncan Campbell, New Voyage round the World, and Political Tracts.
- VII.—Robinson Crusoe.

DEMMIN'S History of Arms and Armour, from the Earliest Period. By Auguste Demmin. Translated by C. C. Black, M.A. With nearly 2000 Illustrations. 7*s.* 6*d.*

DEMOSTHENES' Orations. Translated by C. Rann Kennedy. 5 vols. Vol. I., 3*s.* 6*d.*; Vols. II.–V., 5*s.* each.

DE STAËL'S Corinne or Italy. By Madame de Staël. Translated by Emily Baldwin and Paulina Driver. 3*s.* 6*d.*

DEVEY'S Logic, or the Science of Inference. A Popular Manual. By J. Devey. 5*s.*

DICTIONARY of Latin and Greek Quotations; including Proverbs, Maxims, Mottoes, Law Terms and Phrases. With all the

Quantities marked, and English Translations. With Index Verborum (622 pages). 5*s.*

DICTIONARY of Obsolete and Provincial English. Compiled by Thomas Wright, M.A., F.S A., &c. 2 vols. 5*s.* each.

DIDRON'S Christian Iconography: a History of Christian Art in the Middle Ages. Translated by E. J. Millington and completed by Margaret Stokes. With 240 Illustrations. 2 vols. 5*s.* each.

DIOGENES LAERTIUS. Lives and Opinions of the Ancient Philosophers. Translated by Prof. C. D. Yonge, M.A. 5*s.*

DOBREE'S Adversaria. Edited by the late Prof. Wagner. 2 vols. 5*s.* each.

DODD'S Epigrammatists. A Selection from the Epigrammatic Literature of Ancient, Mediæval, and Modern Times. By the Rev. Henry Philip Dodd, M.A. Oxford. 2nd Edition, revised and enlarged. 6*s.*

DONALDSON'S The Theatre of the Greeks. A Treatise on the History and Exhibition of the Greek Drama. With numerous Illustrations and 3 Plans. By John William Donaldson, D.D. 5*s.*

DRAPER'S History of the Intellectual Development of Europe. By John William Draper, M.D., LL.D. 2 vols. 5*s.* each.

DUNLOP'S History of Fiction. A new Edition. Revised by Henry Wilson. 2 vols. 5*s.* each.

DYER (Dr. T. H.). Pompeii: its **Buildings and Antiquities.** By *T. H.* Dyer, LL.D. With nearly 300 Wood Engravings, a large Map, and a Plan of the Forum. 7*s.* 6*d.*

—— **The City of Rome:** its History and Monuments. With Illustrations. 5*s.*

DYER (T. F. T.) British Popular Customs, Present and Past. An Account of the various Games and Customs associated with Different Days of the Year in the British Isles, arranged according to the Calendar. By the Rev. T. F. Thiselton Dyer, M.A. 5*s.*

EBERS' Egyptian Princess. An Historical Novel. By George Ebers. Translated by E. S. Buchheim. 3*s.* 6*d.*

EDGEWORTH'S Stories for Children. With 8 Illustrations by L. Speed. 3*s.* 6*d.*

ELZE'S William Shakespeare. —*See* SHAKESPEARE.

EMERSON'S Works. 5 vols. 3*s.* 6*d.* each.

I.—Essays and Representative Men.
II.—English Traits, Nature, and Conduct of Life.
III.—Society and Solitude—Letters and Social Aims — Addresses.
VI.—Miscellaneous Pieces.
V.—Poems.

ENNEMOSER'S History of Magic. Translated by William Howitt. 2 vols. 5*s.* each.

EPICTETUS, The Discourses of. With the ENCHEIRIDION and Fragments. Translated by George Long, M.A. 5*s.*

EURIPIDES. A New Literal **Translation in Prose.** By E P. Coleridge, M.A. 2 vols. 5*s.* each.

EUTROPIUS.—*See* JUSTIN.

EUSEBIUS PAMPHILUS, Ecclesiastical History of. Translated by Rev. C. F. Cruse, M.A. 5*s.*

EVELYN'S Diary and Correspondendence. Edited from the Original MSS. by W. Bray, F.A.S. With 45 engravings. 4 vols. 5*s.* each.

FAIRHOLT'S Costume in England. A History of Dress to the end of the Eighteenth Century. 3rd Edition, revised, by Viscount Dillon, V.P.S.A. Illustrated with above 700 Engravings. 2 vols. 5*s.* each.

FIELDING'S Adventures of Joseph Andrews and his Friend Mr. Abraham Adams. With Cruikshank's Illustrations. 3*s.* 6*d.*

—— **History of Tom Jones, a Foundling.** With Cruikshank's Illustrations. 2 vols. 3*s.* 6*d.* each.

—— **Amelia.** With Cruikshank's Illustrations. 5*s.*

FLAXMAN'S Lectures on Sculpture. By John Flaxman, R.A. With Portrait and 53 Plates. 6*s.*

FOSTER'S (John) Life and Correspondence. Edited by J. E. Ryland. 2 vols. 3*s.* 6*d.* each.

—— **Critical Essays.** Edited by J. E. Ryland. 2 vols. 3*s.* 6*d.* each.

—— **Essays**: on Decision of Character; on a Man's writing Memoirs of Himself; on the epithet Romantic; on the aversion of Men of Taste to Evangelical Religion. 3*s.* 6*d.*

—— **Essays** on the Evils of Popular Ignorance; to which is added, a Discourse on the Propagation of Christianity in India. 3*s.* 6*d.*

FOSTER'S Essays on the Improvement of Time. With NOTES OF SERMONS and other Pieces. 3*s.* 6*d.*

GASPARY'S History of Italian Literature. Translated by Herman Oelsner, M.A., Ph.D. Vol. I. 3*s.* 6*d.*

GEOFFREY OF MONMOUTH, Chronicle of.—*See Old English Chronicles.*

GESTA ROMANORUM, or Entertaining Moral Stories invented by the Monks. Translated by the Rev. Charles Swan. Revised Edition, by Wynnard Hooper, B.A. 5*s.*

GILDAS, Chronicles of.—*See Old English Chronicles.*

GIBBON'S Decline and Fall of the Roman Empire. Complete and Unabridged, with Variorum Notes. Edited by an English Churchman. With 2 Maps and Portrait. 7 vols. 3*s.* 6*d.* each.

GILBART'S History, Principles, and Practice of Banking. By the late J. W. Gilbart, F.R.S. New Edition, revised by A. S. Michie. 2 vols. 10*s.*

GIL BLAS, The Adventures of. Translated from the French of Lesage by Smollett. With 24 Engravings on Steel, after Smirke, and 10 Etchings by George Cruikshank. 6*s.*

GIRALDUS CAMBRENSIS' Historical Works. Translated by Th. Forester, M.A., and Sir R. Colt Hoare. Revised Edition, Edited by Thomas Wright, M.A., F.S.A. 5*s.*

GOETHE'S Faust. Part I. German Text with Hayward's Prose Translation and Notes. Revised by C. A. Buchheim, Ph.D. 5*s.*

GOETHE'S Works. Translated into English by various hands. 14 vols. 3*s.* 6*d.* each.

- I. and II.—Autobiography and Annals.
- III.—Faust. Two Parts, complete. (Swanwick.)
- IV.—Novels and Tales.
- V.—Wilhelm Meister's Apprenticeship.
- VI.—Conversations with Eckermann and Soret.
- VIII.—Dramatic Works.
- IX.—Wilhelm Meister's Travels.
- X.—Tour in Italy, and Second Residence in Rome.
- XI.—Miscellaneous Travels.
- XII.—Early and Miscellaneous Letters.
- XIV.—Reineke Fox, West-Eastern Divan and Achilleid.

GOLDSMITH'S Works. A new Edition, by J. W. M. Gibbs. 5 vols. 3*s.* 6*d.* each.

GRAMMONT'S Memoirs of the Court of Charles II. Edited by Sir Walter Scott. Together with the BOSCOBEL TRACTS, including two not before published, &c. New Edition. 5*s.*

GRAY'S Letters. Including the Correspondence of Gray and Mason. Edited by the Rev. D. C. Tovey, M.A. Vols. I. and II. 3*s.* 6*d.* each.

GREEK ANTHOLOGY. Translated by George Burges, M.A. 5*s.*

GREEK ROMANCES of Heliodorus, Longus, and Achilles Tatius—viz., The Adventures of Theagenes & Chariclea; Amours of Daphnis and Chloe; and Loves of Clitopho and Leucippe. Translated by Rev. R. Smith, M.A. 5*s.*

GREGORY'S Letters on the Evidences, Doctrines, & Duties of the Christian Religion. By Dr. Olinthus Gregory. 3*s.* 6*d.*

GREENE, MARLOWE, and BEN JONSON. Poems of. Edited by Robert Bell. 3*s.* 6*d.*

GRIMM'S TALES. With the Notes of the Original. Translated by Mrs. A. Hunt. With Introduction by Andrew Lang, M.A. 2 vols. 3*s.* 6*d.* each.

—— **Gammer Grethel;** or, German Fairy Tales and Popular Stories. Containing 42 Fairy Tales. Trans. by Edgar Taylor. With numerous Woodcuts after George Cruikshank and Ludwig Grimm. 3*s.* 6*d.*

GROSSI'S Marco Visconti. Translated by A. F. D. The Ballads rendered into English Verse by C. M. P. 3*s.* 6*d.*

GUIZOT'S History of the English Revolution of 1640. From the Accession of Charles I. to his Death. Translated by William Hazlitt. 3*s.* 6*d.*

—— **History of Civilisation,** from the Fall of the Roman Empire to the French Revolution. Translated by William Hazlitt. 3 vols. 3*s.* 6*d.* each.

HALL'S (Rev. Robert) Miscellaneous Works and Remains. 3*s.* 6*d.*

HAMPTON COURT: A Short History of the Manor and Palace. By Ernest Law, B.A. With numerous Illustrations. 5*s.*

HARDWICK'S History of the Articles of Religion. By the late C. Hardwick. Revised by the Rev. Francis Procter, M.A. 5*s.*

HAUFF'S Tales. The Caravan—The Sheik of Alexandria—The Inn in the Spessart. Trans. from the German by S. Mendel. 3*s.* 6*d.*

HAWTHORNE'S Tales. 4 vols. 3*s.* 6*d.* each.

- I.—Twice-told Tales, and the Snow Image.
- II.—Scarlet Letter, and the House with the Seven Gables.
- III.—Transformation [The Marble Faun], and Blithedale Romance.
- IV.—Mosses from an Old Manse.

HAZLITT'S Table-talk. Essays on Men and Manners. By W. Hazlitt. 3*s.* 6*d.*

—— **Lectures on the Literature of the Age of Elizabeth** and on Characters of Shakespeare's Plays. 3*s.* 6*d.*

—— **Lectures on the English Poets,** and on the English Comic Writers. 3*s.* 6*d.*

—— **The Plain Speaker.** Opinions on Books, Men, and Things. 3*s.* 6*d.*

—— **Round Table.** 3*s.* 6*d.*

—— **Sketches and Essays.** 3*s.* 6*d.*

—— **The Spirit of the Age;** or, Contemporary Portraits. Edited by W. Carew Hazlitt. 3*s.* 6*d.*

—— **View of the English Stage.** Edited by W. Spencer Jackson. 3*s.* 6*d.*

HEATON'S Concise History of Painting. New Edition, revised by Cosmo Monkhouse. 5*s.*

HEGEL'S Lectures on the Philosophy of History. Translated by J. Sibree, M.A.

HEINE'S Poems, Complete Translated by Edgar A. Bowring, C.B. 3*s.* 6*d.*

—— **Travel-Pictures,** including the Tour in the *Harz,* Norderney, and Book of Ideas, together with the Romantic School. Translated by Francis Storr. A New Edition, revised throughout. With Appendices and Maps. 3*s.* 6*d.*

HELP'S Life of Christopher Columbus, the Discoverer of America. By Sir Arthur Helps, K.C.B. 3*s.* 6*d.*

—— **Life of Hernando Cortes,** and the Conquest of Mexico. 2 vols. 3*s.* 6*d.* each.

—— **Life of Pizarro.** 3*s.* 6*d.*

—— **Life of Las Casas** the Apostle of the Indies. 3*s.* 6*d.*

HENDERSON (E.) Select Historical Documents of the Middle Ages, including the most famous Charters relating to England, the Empire, the Church, &c., from the 6th to the 14th Centuries. Translated from the Latin and edited by Ernest F. Henderson, A.B., A.M., Ph.D. 5*s.*

HENFREY'S Guide to English Coins, from the Conquest to the present time. New and revised Edition by C. F. Keary, M.A., F.S.A. 6*s.*

HENRY OF HUNTINGDON'S History of the English. Translated by T. Forester, M.A. 5*s.*

HENRY'S (Matthew) Exposition of the Book of the Psalms. 5*s.*

HELIODORUS. Theagenes and Chariclea. — *See* GREEK ROMANCES.

HERODOTUS. Translated by the Rev. Henry Cary, M.A. 3*s.* 6*d.*

—— **Notes on,** Original and Selected from the best Commentators. By D. W. Turner, M.A. With Coloured Map. 5*s.*

—— **Analysis and Summary of.** By J. T. Wheeler. 5*s.*

HESIOD, CALLIMACHUS, and THEOGNIS. Translated by the Rev. J. Banks, M.A. 5s.

HOFFMANN'S (E. T. W.) The Serapion Brethren. Translated from the German by Lt.-Col. Alex. Ewing. 2 vols. 3s. 6d. each.

HOLBEIN'S Dance of Death and Bible Cuts. Upwards of 150 Subjects, engraved in facsimile, with Introduction and Descriptions by Francis Douce and Dr. Thomas Frognall Dibden. 5s.

HOMER'S Iliad. Translated into English Prose by T. A. Buckley, B.A. 5s.

—— **Odyssey.** Hymns, Epigrams, and Battle of the Frogs and Mice. Translated into English Prose by T. A. Buckley, B.A. 5s.

—— *See also* POPE.

HOOPER'S (G.) Waterloo: The Downfall of the First Napoleon: a History of the Campaign of 1815. By George Hooper. With Maps and Plans. 3s. 6d.

—— **The Campaign of Sedan:** The Downfall of the Second Empire, August-September, 1870. With General Map and Six Plans of Battle. 3s. 6d.

HORACE. A new literal Prose translation, by A. Hamilton Bryce, LL.D. 3s. 6d.

HUGO'S (Victor) Dramatic Works. Hernani—Ruy Blas—The King's Diversion. Translated by Mrs. Newton Crosland and F. L. Slous. 3s. 6d.

—— **Poems, chiefly Lyrical.** Translated by various Writers, now first collected by J. H. L. Williams. 3s. 6d.

HUMBOLDT'S Cosmos. *Translated by E. C. Otté, B. H. Paul, and W. S. Dallas, F.L.S. 5 vols. 3s. 6d.* each, excepting Vol. V. 5s.

HUMBOLDT'S Personal Narrative of his Travels to the Equinoctial Regions of America during the years 1799-1804. Translated by T. Ross. 3 vols. 5s. each.

—— **Views of Nature.** Translated by E. C. Otté and H. G. Bohn. 5s.

HUMPHREYS' Coin Collector's Manual. By H. N. Humphreys, with upwards of 140 Illustrations on Wood and Steel. 2 vols. 5s. each.

HUNGARY: its History and Revolution, together with a copious Memoir of Kossuth. 3s. 6d.

HUTCHINSON (Colonel). Memoirs of the Life of. By his Widow, Lucy: together with her Autobiography, and an Account of the Siege of Lathom House. 3s. 6d.

HUNT'S Poetry of Science. By Richard Hunt. 3rd Edition, revised and enlarged. 5s.

INGULPH'H Chronicles of the Abbey of Croyland, with the CONTINUATION by Peter of Blois and other Writers. Translated by H. T. Riley, M.A. 5s.

IRVING'S (Washington) Complete Works. 15 vols. With Portraits, &c. 3s. 6d. each.

- I.—Salmagundi, Knickerbocker's History of New York.
- II.—The Sketch-Book, and the Life of Oliver Goldsmith.
- III.—Bracebridge Hall, Abbotsford and Newstead Abbey.
- IV.—The Alhambra, Tales of a Traveller.
- V.—Chronicle of the Conquest of Granada, Legends of the Conquest of Spain.

IRVING'S (WASHINGTON) COMPLETE WORKS *continued.*

- VI. & VII.—Life and Voyages of Columbus, together with the Voyages of his Companions.
- VIII.—Astoria, A Tour on the Prairies.
- IX.—Life of Mahomet, Lives of the Successors of Mahomet.
- X.—Adventures of Captain Bonneville, U.S.A., Wolfert's Roost.
- XI.—Biographies and Miscellaneous Papers.
- XII.-XV.—Life of George Washington. 4 vols.

—— **Life and Letters.** By his Nephew, Pierre E. Irving. 2 vols. 3*s.* 6*d.* each.

ISOCRATES, The Orations of. Translated by J. H. Freese, M.A. Vol. I. 5*s.*

JAMES'S (G. P. R.) Life of Richard Cœur de Lion. 2 vols. 3*s.* 6*d.* each.

JAMESON'S (Mrs.) Shakespeare's Heroines. Characteristics of Women: Moral, Poetical, and Historical. By Mrs. Jameson. 3*s.* 6*d.*

JESSE'S (E.) Anecdotes of Dogs With 40 Woodcuts and 34 Steel Engravings. 5*s.*

JESSE'S (J. H.) Memoirs of the Court of England during the Reign of the Stuarts, including the Protectorate. 3 vols. With 42 Portraits. 5*s.* each.

—— **Memoirs of the Pretenders and their Adherents.** With 6 Portraits. 5*s.*

JOHNSON'S Lives of the Poets. Edited by Mrs. Alexander Napier, *with Introduction by Professor Hales.* 3 vols. 3*s.* 6*d.* each.

JOSEPHUS (Flavius), The Works of. Whiston's Translation, revised by Rev. A. R. Shilleto, M.A With Topographical and Geographical Notes by Colonel Sir C. W. Wilson, K.C.B. 5 vols. 3*s.* 6*d.* each.

JOYCE'S Scientific Dialogues. With numerous Woodcuts. 5*s.*

JUKES-BROWNE (A. J.), The Building of the British Isles: a Study in Geographical Evolution. Illustrated by numerous Maps and Woodcuts. 2nd Edition, revised, 7*s.* 6*d.*

JULIAN, the Emperor. Containing Gregory Nazianzen's Two Invectives and Libanus' Monody, with Julian's extant Theosophical Works. Translated by C. W. King, M.A. 5*s.*

JUNIUS'S Letters. With all the Notes of Woodfall's Edition, and important Additions. 2 vols. 3*s.* 6*d.* each.

JUSTIN CORNELIUS NEPOS, and EUTROPIUS. Translated by the Rev. J. S. Watson, M.A. 5*s.*

JUVENAL, PERSIUS, SULPICIA and LUCILIUS. Translated by L. Evans, M.A. 5*s.*

KANT'S Critique of Pure Reason. Translated by J. M. D. Meiklejohn. 5*s.*

—— **Prolegomena and Metaphysical Foundations of Natural Science.** Translated by E. Belfort Bax. 5*s.*

KEIGHTLEY'S (Thomas) Mythology of Ancient Greece and Italy. 4th Edition, revised by Leonard Schmitz, Ph.D., LL.D. With 12 Plates from the Antique. 5*s.*

KEIGHTLEY'S Fairy Mythology, illustrative of the Romance and Superstition of Various Countries. Revised Edition, with Frontispiece by Cruikshank. 5*s*.

LA FONTAINE'S Fables. Translated into English Verse by Elizur Wright. New Edition, with Notes by J. W. M. Gibbs. 3*s*. 6*d*.

LAMARTINE'S History of the Girondists. Translated by H. T. Ryde. 3 vols. 3*s*. 6*d*. each.

—— **History of the Restoration of Monarchy in France** (a Sequel to the History of the Girondists). 4 vols. 3*s*. 6*d*. each.

—— **History of the French Revolution of 1848.** 3*s*. 6*d*.

LAMB'S (Charles) Essays of Elia and Eliana. Complete Edition. 3*s*. 6*d*.

—— **Specimens of English Dramatic Poets of the Time of Elizabeth.** 3*s*. 6*d*.

—— **Memorials and Letters of Charles Lamb.** By Serjeant Talfourd. New Edition, revised, by W. Carew Hazlitt. 2 vols. 3*s*. 6*d*. each.

—— **Tales from Shakespeare** With Illustrations by Byam Shaw. 3*s*. 6*d*.

LANE'S Arabian Nights' Entertainments. Edited by Stanley Lane-Poole, M.A., Litt.D. 4 vols. 3*s*. 6*d*. each.

LANZI'S History of Painting in Italy, from the Period of the Revival of the Fine Arts to the End of the Eighteenth Century. Translated by Thomas Roscoe. 3 vols. 3*s*. 6*d*. each.

LAPPENBERG'S History of England under the Anglo-Saxon Kings. Translated by B. Thorpe, F.S.A. New edition, revised by E. C. Otté. 2 vols. 3*s*. 6*d*. each.

LECTURES ON PAINTING, by Barry, Opie, Fuseli. Edited by R. Wornum. 5*s*.

LEONARDO DA VINCI'S Treatise on Painting. Translated by J. F. Rigaud, R.A., With a Life of Leonardo by John William Brown. With numerous Plates. 5*s*.

LEPSIUS'S Letters from Egypt, Ethiopia, and the Peninsula of Sinai. Translated by L. and J. B. Horner. With Maps. 5*s*.

LESSING'S Dramatic Works, Complete. Edited by Ernest Bell, M.A. With Memoir of Lessing by Helen Zimmern. 2 vols. 3*s*. 6*d*. each.

—— **Laokoon, Dramatic Notes, and the Representation of Death by the Ancients.** Translated by E. C. Beasley and Helen Zimmern. Edited by Edward Bell, M.A. With a Frontispiece of the Laokoon group. 3*s*. 6*d*.

LILLY'S Introduction to Astrology. With a GRAMMAR OF ASTROLOGY and Tables for Calculating Nativities, by Zadkiel. 5*s*.

LIVY'S History of Rome. Translated by Dr. Spillan, C. Edmonds, and others. 4 vols. 5*s*. each.

LOCKE'S Philosophical Works. Edited by J. A. St. John. 2 vols. 3*s*. 6*d*. each.

—— **Life and Letters:** By Lord King. 3*s*. 6*d*.

LOCKHART (J. G.)—*See* BURNS.

LODGE'S Portraits of Illustrious Personages of Great Britain, with Biographical and Historical Memoirs. 240 Portraits engraved on Steel, with the respective Biographies unabridged. 8 vols. 5*s.* each.

LONGFELLOW'S Prose Works. With 16 full-page Wood Engravings. 5*s.*

LOUDON'S (Mrs.) Natural History. Revised edition, by W. S. Dallas, F.L.S. With numerous Woodcut Illus. 5*s.*

LOWNDES' Bibliographer's Manual of English Literature. Enlarged Edition. By H. G. Bohn. 6 vols. cloth, 5*s.* each. Or 4 vols. half morocco, 2*l.* 2*s.*

LONGUS. Daphnis and Chloe. —*See* GREEK ROMANCES.

LUCAN'S Pharsalia. Translated by H. T. Riley, M.A. 5*s.*

LUCIAN'S Dialogues of the Gods, of the Sea Gods, and of the Dead. Translated by Howard Williams, M.A. 5*s.*

LUCRETIUS. Translated by the Rev. J. S. Watson, M.A. 5*s.*

LUTHER'S Table-Talk. Translated and Edited by William Hazlitt. 3*s.* 6*d.*

—— **Autobiography.** — *See* MICHELET.

MACHIAVELLI'S History of Florence, together with the Prince, Savonarola, various Historical Tracts, and a Memoir of Machiavelli. 3*s.* 6*d.*

MALLET'S Northern Antiquities, or an Historical Account of the Manners, Customs, Religions and Laws, Maritime Expeditions and Discoveries, Language and Literature, of the Ancient Scandinavians. Translated by Bishop Percy. Revised and Enlarged Edition, with a Translation of the PROSE EDDA, by J. A. Blackwell. 5*s.*

MANTELL'S (Dr.) Petrifactions and their Teachings. With numerous illustrative Woodcuts. 6*s.*

—— **Wonders of Geology.** 8th Edition, revised by T. Rupert Jones, F.G.S. With a coloured Geological Map of England, Plates, and upwards of 200 Woodcuts. 2 vols. 7*s.* 6*d.* each.

MANZONI. The Betrothed: being a Translation of 'I Promessi Sposi.' By Alessandro Manzoni. With numerous Woodcuts. 5*s.*

MARCO POLO'S Travels; the Translation of Marsden revised by T. Wright, M.A., F.S.A. 5*s.*

MARRYAT'S (Capt. R.N.) Masterman Ready. With 93 Woodcuts. 3*s.* 6*d.*

—— **Mission;** or, Scenes in Africa. Illustrated by Gilbert and Dalziel. 3*s.* 6*d.*

—— **Pirate and Three Cutters.** With 8 Steel Engravings, from Drawings by Clarkson Stanfield, R.A. 3*s.* 6*d.*

—— **Privateersman.** 8 Engravings on Steel. 3*s.* 6*d.*

—— **Settlers in Canada.** 10 Engravings by Gilbert and Dalziel. 3*s.* 6*d.*

—— **Poor Jack.** With 16 Illustrations after Clarkson Stansfield, R.A. 3*s.* 6*d.*

—— **Peter Simple.** With 8 full-page Illustrations. 3*s.* 6*d.*

—— **Midshipman Easy.** With 8 full-page Illustrations. 3*s.* 6*d.*

MARTIAL'S Epigrams, complete. Translated into Prose, each accompanied by one or more Verse Translations selected from the Works of English Poets, and other sources. 7*s.* 6*d.*

MARTINEAU'S (Harriet) History of England, from 1800–1815. 3*s*. 6*d*.

—— **History of the Thirty Years' Peace**, A.D. 1815-46. 4 vols. 3*s*. 6*d*. each.

—— *See Comte's Positive Philosophy*.

MATTHEW PARIS'S English History, from the Year 1235 to 1273. Translated by Rev. J. A. Giles, D.C.L. 3 vols. 5*s*. each.

MATTHEW OF WESTMINSTER'S Flowers of History, from the beginning of the World to A.D. 1307. Translated by C. D. Yonge, M.A. 2 vols. 5*s*. each.

MAXWELL'S Victories of Wellington and the British Armies. Frontispiece and 5 Portraits. 5*s*.

MENZEL'S History of Germany, from the Earliest Period to 1842. 3 vols. 3*s*. 6*d*. each.

MICHAEL ANGELO AND RAPHAEL, their Lives and Works. By Duppa and Quatremere de Quincy. With Portraits, and Engravings on Steel. 5*s*.

MICHELET'S Luther's Autobiography. Trans. by William Hazlitt. With an Appendix (110 pages) of Notes. 3*s*. 6*d*.

—— **History of the French Revolution** from its earliest indications to the flight of the King in 1791. 3*s*. 6*d*.

MIGNET'S History of the French Revolution, from 1789 to 1814. 3*s*. 6*d*.

MILL (J. S.). Early Essays by John Stuart Mill. Collected from various sources by J. W. M. Gibbs. 3*s*. 6*d*.

MILLER (Professor). History Philosophically Illustrated, from the Fall of the Roman Empire to the French Revolution. 4 vols. 3*s*. 6*d*. each.

MILTON'S Prose Works. Edited by J. A. St. John. 5 vols. 3*s*. 6*d*. each.

—— **Poetical Works**, with a Memoir and Critical Remarks by James Montgomery, an Index to Paradise Lost, Todd's Verbal Index to all the Poems, and a Selection of Explanatory Notes by Henry G. Bohn. Illustrated with 120 Wood Engravings from Drawings by W. Harvey. 2 vols. 3*s*. 6*d*. each.

MITFORD'S (Miss) Our Village Sketches of Rural Character and Scenery. With 2 Engravings on Steel. 2 vols. 3*s*. 6*d*. each.

MOLIÈRE'S Dramatic Works. A new Translation in English Prose, by C. H. Wall. 3 vols. 3*s*. 6*d*. each.

MONTAGU. The Letters and Works of Lady Mary Wortley Montagu. Edited by her great-grandson, Lord Wharncliffe's Edition, and revised by W. Moy Thomas. New Edition, revised, with 5 Portraits. 2 vols. 5*s*. each.

MONTAIGNE'S Essays. Cotton's Translation, revised by W. C. Hazlitt. New Edition. 3 vols. 3*s*. 6*d*. each.

MONTESQUIEU'S Spirit of Laws. New Edition, revised and corrected. By J. V. Pritchard, A.M. 2 vols. 3*s*. 6*d*. each.

MORPHY'S Games of Chess. Being the Matches and best Games played by the American Champion, with Explanatory and Analytical Notes by J. Löwenthal. 5*s*.

MOTLEY (J. L.). The Rise of the Dutch Republic. A History. By John Lothrop Motley. New Edition, with Biographical Introduction by Moncure D. Conway. 3 vols. 3*s*. 6*d*. each.

MUDIE'S British Birds; or, History of the Feathered Tribes of the British Islands. Revised by W. C. L. Martin. With 52 Figures of Birds and 7 Coloured Plates of Eggs. 2 vols.

NEANDER (Dr. A.). History of the Christian Religion and Church. Trans. from the German by J. Torrey. 10 vols. 3*s.* 6*d.* each.

—— **Life of Jesus Christ.** Translated by J. McClintock and C. Blumenthal. 3*s.* 6*d.*

—— **History of the Planting and Training of the Christian Church by the Apostles.** Translated by J. E. Ryland. 2 vols. 3*s.* 6*d.* each.

—— **Memorials of Christian Life in the Early and Middle Ages**; including Light in Dark Places. Trans. by J. E. Ryland. 3*s.* 6*d.*

NIBELUNGEN LIED. The Lay of the Nibelungs, metrically translated from the old German text by Alice Horton, and edited by Edward Bell, M.A. To which is prefixed the Essay on the Nibelungen Lied by Thomas Carlyle. 5*s.*

NEW TESTAMENT (The) in Greek. Griesbach's Text, with various Readings at the foot of the page, and Parallel References in the margin; also a Critical Introduction and Chronological Tables. By an eminent Scholar, with a Greek and English Lexicon. 3rd Edition, revised and corrected. Two Facsimiles of Greek Manuscripts. 900 pages. 5*s.*

The Lexicon may be had separately, price 2*s.*

NICOLINI'S History of the Jesuits: their Origin, Progress, Doctrines, and Designs. With 8 Portraits. 5*s.*

NORTH (R.) Lives of the Right Hon. Francis North, Baron Guildford, the Hon. Sir Dudley North, and the Hon. and Rev. Dr. John North. By the Hon. Roger North. Together with the Autobiography of the Author. Edited by Augustus Jessopp, D.D. 3 vols. 3*s.* 6*d.* each.

NUGENT'S (Lord) Memorials of Hampden, his Party and Times. With a Memoir of the Author, an Autograph Letter, and Portrait. 5*s.*

OLD ENGLISH CHRONICLES, including Ethelwerd's Chronicle, Asser's Life of Alfred, Geoffrey of Monmouth's British History, Gildas, Nennius, and the spurious chronicle of Richard of Cirencester. Edited by J. A. Giles, D.C.L. 5*s.*

OMAN (J. C.) The Great Indian Epics: the Stories of the RAMAYANA and the MAHABHARATA. By John Campbell Oman, Principal of Khalsa College, Amritsar. With Notes, Appendices, and Illustrations. 3*s.* 6*d.*

ORDERICUS VITALIS' Ecclesiastical History of England and Normandy. Translated by T. Forester, M.A. To which is added the CHRONICLE OF ST. EVROULT. 4 vols. 5*s.* each.

OVID'S Works, complete. Literally translated into Prose. 3 vols. 5*s.* each.

PASCAL'S Thoughts. Translated from the Text of M. Auguste Molinier by C. Kegan Paul. 3rd Edition. 3*s.* 6*d.*

PAULI'S (Dr. R.) Life of Alfred the Great. Translated from the German. To which is appended Alfred's ANGLO-SAXON VERSION

OF OROSIUS. With a literal Translation interpaged, Notes, and an ANGLO-SAXON GRAMMAR and GLOSSARY, by B. Thorpe. 5*s*.

PAUSANIAS' Description of Greece. Newly translated by A. R. Shilleto, M.A. 2 vols. 5*s*. each.

PEARSON'S Exposition of the Creed. Edited by E. Walford, M.A. 5*s*.

PEPYS' Diary and Correspondence. Deciphered by the Rev. J. Smith, M.A., from the original Shorthand MS. in the Pepysian Library. Edited by Lord Braybrooke. 4 vols. With 31 Engravings. 5*s*. each.

PERCY'S Reliques of Ancient English Poetry. With an Essay on Ancient Minstrels and a Glossary. Edited by J. V. Pritchard, A.M. 2 vols. 3*s*. 6*d*. each.

PERSIUS.—*See* JUVENAL.

PETRARCH'S Sonnets, Triumphs, and other Poems. Translated into English Verse by various Hands. With a Life of the Poet by Thomas Campbell. With Portrait and 15 Steel Engravings. 5*s*.

PHILO-JUDÆUS, Works of. Translated by Prof. C. D. Yonge, M.A. 4 vols. 5*s*. each.

PICKERING'S History of the Races of Man, and their Geographical Distribution. With AN ANALYTICAL SYNOPSIS OF THE NATURAL HISTORY OF MAN by Dr. Hall. With a Map of the World and 12 coloured Plates. 5*s*.

PINDAR. Translated into Prose by Dawson W. Turner. To which is added the Metrical Version by Abraham Moore. 5*s*.

PLANCHÉ. History of British Costume, from the Earliest Time to the Close of the Eighteenth Century. By J. R. Planché, Somerset Herald. With upwards of 400 Illustrations. 5*s*.

PLATO'S Works. Literally translated, with Introduction and Notes. 6 vols. 5*s*. each.

- I.—The Apology of Socrates, Crito, Phædo, Gorgias, Protagoras, Phædrus, Theætetus, Euthyphron, Lysis. Translated by the Rev. H. Carey.
- II.—The Republic, Timæus, and Critias. Translated by Henry Davis.
- III.—Meno, Euthydemus, The Sophist, Statesman, Cratylus, Parmenides, and the Banquet. Translated by G. Burges.
- IV.—Philebus, Charmides, Laches, Menexenus, Hippias, Ion, The Two Alcibiades, Theages, Rivals, Hipparchus, Minos, Clitopho, Epistles. Translated by G. Burges.
- V.—The Laws. Translated by G. Burges.
- VI.—The Doubtful Works. Translated by G. Burges.

—— **Summary and Analysis of the Dialogues.** With Analytical Index. By A. Day, LL.D. 5*s*.

PLAUTUS'S Comedies. Translated by H. T. Riley, M.A. 2 vols. 5*s*. each.

PLINY'S Natural History. Translated by the late John Bostock, M.D., F.R.S., and H. T. Riley, M.A. 6 vols. 5*s*. each.

PLINY. The Letters of Pliny the Younger. Melmoth's translation, revised by the Rev. F. C. T. Bosanquet, M.A. 5*s*.

PLOTINUS, Select Works of. Translated by Thomas Taylor. With an Introduction containing the substance of Porphyry's Plotinus. Edited by G. R. S. Mead, B.A., M.R.A.S. 5*s*.

PLUTARCH'S Lives. Translated by A. Stewart, M.A., and George Long, M.A. 4 vols. 3*s.* 6*d.* each.

—— **Morals.** Theosophical Essays. Translated by C. W. King, M.A. 5*s.*

—— **Morals.** Ethical Essays. Translated by the Rev. A. R. Shilleto, M.A. 5*s.*

POETRY OF AMERICA. Selections from One Hundred American Poets, from 1776 to 1876. By W. J. Linton. 3*s.* 6*d.*

POLITICAL CYCLOPÆDIA. A Dictionary of Political, Constitutional, Statistical, and Forensic Knowledge; forming a Work of Reference on subjects of Civil Administration, Political Economy, Finance, Commerce, Laws, and Social Relations. 4 vols. 3*s.* 6*d.* each.

POPE'S Poetical Works. Edited, with copious Notes, by Robert Carruthers. With numerous Illustrations. 2 vols. 5*s.* each.

—— **Homer's Iliad.** Edited by the Rev. J. S. Watson, M.A. Illustrated by the entire Series of Flaxman's Designs. 5*s.*

—— **Homer's Odyssey,** with the Battle of Frogs and Mice, Hymns, &c., by other translators. Edited by the Rev. J. S. Watson, M.A. With the entire Series of Flaxman's Designs. 5*s.*

—— **Life,** including many of his Letters. By Robert Carruthers. With numerous Illustrations. 5*s.*

POUSHKIN'S Prose Tales: The Captain's Daughter—Doubrovsky — The Queen of Spades — An Amateur Peasant Girl—The Shot —The Snow Storm—The Postmaster — The Coffin Maker — Kirdjali—The Egyptian Nights—Peter the Great's Negro. Translated by T. Keane. 3*s.* 6*d.*

PRESCOTT'S Conquest of Mexico. Copyright edition, with the notes by John Foster Kirk, and an introduction by G. P. Winship. 3 vols. 3*s.* 6*d.* each.

—— **Conquest of Peru.** Copyright edition, with the notes of John Foster Kirk. 2 vols. 3*s.* 6*d.* each.

—— **Reign of Ferdinand and Isabella.** Copyright edition, with the notes of John Foster Kirk. 3 vols. 3*s.* 6*d.* each.

PROPERTIUS. Translated by Rev. P. J. F. Gantillon, M.A., and accompanied by Poetical Versions, from various sources. 3*s.* 6*d.*

PROVERBS, Handbook of. Containing an entire Republication of Ray's Collection of English Proverbs, with his additions from Foreign Languages and a complete Alphabetical Index; in which are introduced large additions as well of Proverbs as of Sayings, Sentences, Maxims, and Phrases, collected by H. G. Bohn. 5*s.*

PROVERBS, A Polyglot of Foreign. Comprising French, Italian, German, Dutch, Spanish, Portuguese, and Danish. With English Translations & a General Index by H. G. Bohn. 5*s.*

POTTERY AND PORCELAIN, and other Objects of Vertu. Comprising an Illustrated Catalogue of the Bernal Collection of Works of Art, with the prices at which they were sold by auction, and names of the possessors. To which are added, an Introductory Lecture on Pottery and Porcelain, and an Engraved List of all the known Marks and Monograms. By Henry G. Bohn. With numerous Wood Engravings, 5*s.*; or with Coloured Illustrations, 10*s.* 6*d.*

PROUT'S (Father) Reliques. Collected and arranged by Rev. F. Mahony. New issue, with 21 Etchings by D. Maclise, R.A. Nearly 600 pages. 5*s.*

QUINTILIAN'S Institutes of Oratory, or Education of an Orator. Translated by the Rev. J. S. Watson, M.A. 2 vols. 5*s.* each.

RACINE'S (Jean) Dramatic Works. A metrical English version. By R. Bruce Boswell, M.A. Oxon. 2 vols. 3*s.* 6*d.* each.

RANKE'S History of the Popes, their Church and State, and especially of their Conflicts with Protestantism in the 16th and 17th centuries. Translated by E. Foster. 3 vols. 3*s.* 6*d.* each.

—— **History of Servia and the Servian Revolution.** With an Account of the Insurrection in Bosnia. Translated by Mrs. Kerr. 3*s.* 6*d.*

RECREATIONS in SHOOTING. By 'Craven.' With 62 Engravings on Wood after Harvey, and 9 Engravings on Steel, chiefly after A. Cooper, R.A. 5*s.*

RENNIE'S Insect Architecture. Revised and enlarged by Rev. J. G. Wood, M.A. With 186 Woodcut Illustrations. 5*s.*

REYNOLD'S (Sir J.) Literary Works. Edited by H. W. Beechy. 2 vols. 3*s.* 6*d.* each.

RICARDO on the Principles of Political Economy and Taxation. Edited by E. C. K. Gonner, M.A. 5*s.*

RICHTER (Jean Paul Friedrich). Levana, a Treatise on Education: together with the Autobiography (a Fragment), and a short Prefatory Memoir. 3*s.* 6*d.*

—— **Flower, Fruit, and Thorn Pieces,** or the Wedded Life, Death, and Marriage of Firmian Stanislaus Siebenkaes, Parish Advocate in the Parish of Kuhschnapptel. *Newly translated* by Lt.-Col. Alex. *Ewing.* 3*s.* 6*d.*

ROGER DE HOVEDEN'S Annals of English History, comprising the History of England and of other Countries of Europe from A.D. 732 to A.D. 1201. Translated by H. T. Riley, M.A. 2 vols. 5*s.* each.

ROGER OF WENDOVER'S Flowers of History, comprising the History of England from the Descent of the Saxons to A.D. 1235, formerly ascribed to Matthew Paris. Translated by J. A. Giles, D.C.L. 2 vols. 5*s.* each.

ROME in the NINETEENTH CENTURY. Containing a complete Account of the Ruins of the Ancient City, the Remains of the Middle Ages, and the Monuments of Modern Times. By C. A. Eaton. With 34 Steel Engravings. 2 vols. 5*s.* each.

—— *See* BURN and DYER.

ROSCOE'S (W.) Life and Pontificate of Leo X. Final edition, revised by Thomas Roscoe. 2 vols. 3*s.* 6*d.* each.

—— **Life of Lorenzo de' Medici,** called 'the Magnificent.' With his poems, letters, &c. 10th Edition, revised, with Memoir of Roscoe by his Son. 3*s.* 6*d.*

RUSSIA. History of, from the earliest Period, compiled from the most authentic sources by Walter K. Kelly. With Portraits. 2 vols. 3*s.* 6*d.* each.

SALLUST, FLORUS, and VELLEIUS PATERCULUS. Translated by J. S. Watson, M.A. 5*s.*

SCHILLER'S Works. Translated by various hands. 7 vols. 3*s.* 6*d.* each:—

I.—History of the Thirty Years' War.

SCHILLER'S WORKS *continued.*

II.—History of the Revolt in the Netherlands, the Trials of Counts Egmont and Horn, the Siege of Antwerp, and the Disturbances in France preceding the Reign of Henry IV.

III.—Don Carlos, Mary Stuart, Maid of Orleans, Bride of Messina, together with the Use of the Chorus in Tragedy (a short Essay).

These Dramas are all translated in metre.

IV.—Robbers (with Schiller's original Preface), Fiesco, Love and Intrigue, Demetrius, Ghost Seer, Sport of Divinity.

The Dramas in this volume are translated into Prose.

V.—Poems.

VI.—Essays, Æsthetical and Philosophical

VII.—Wallenstein's Camp, Piccolomini and Death of Wallenstein, William Tell.

SCHILLER and GOETHE. Correspondence between, from A.D. 1794–1805. Translated by L. Dora Schmitz. 2 vols. 3*s*. 6*d*. each.

SCHLEGEL'S (F.) Lectures on the Philosophy of Life and the Philosophy of Language. Translated by the Rev. A. J. W. Morrison, M.A. 3*s*. 6*d*.

—— **Lectures on the History of Literature,** Ancient and Modern. Translated from the German. 3*s*. 6*d*.

—— **Lectures on the Philosophy of History.** Translated by J. B. Robertson. 3*s*. 6*d*.

***SCHLEGEL'S* Lectures on *Modern History*,** together with *the Lectures* entitled Cæsar and Alexander, and The Beginning of our History. Translated by L. Purcell and R. H. Whitelock. 3*s*. 6*d*.

—— **Æsthetic and Miscellaneous Works.** Translated by E. J. Millington. 3*s*. 6*d*.

SCHLEGEL (A. W.) Lectures on Dramatic Art and Literature. Translated by J. Black. Revised Edition, by the Rev. A. J. W. Morrison, M.A. 3*s*. 6*d*.

SCHOPENHAUER on the Fourfold Root of the Principle of Sufficient Reason, and On the Will in Nature. Translated by Madame Hillebrand. 5*s*.

—— **Essays.** Selected and Translated. With a Biographical Introduction and Sketch of his Philosophy, by E. Belfort Bax. 5*s*.

SCHOUW'S Earth, Plants, and Man. Translated by A. Henfrey. With coloured Map of the Geography of Plants. 5*s*.

SCHUMANN (Robert). His Life and Works, by August Reissmann. Translated by A. L. Alger. 3*s*. 6*d*.

—— **Early Letters.** Originally published by his Wife. Translated by May Herbert. With a Preface by Sir George Grove, D.C.L. 3*s*. 6*d*.

SENECA on Benefits. Newly translated by A. Stewart, M.A. 3*s*. 6*d*.

—— **Minor Essays and On Clemency.** Translated by A. Stewart, M.A. 5*s*.

SHAKESPEARE DOCUMENTS. Arranged by D. H. Lambert, B.A. 3*s*. 6*d*.

SHAKESPEARE'S Dramatic Art. The History and Character of Shakespeare's Plays. By Dr. Hermann Ulrici. Translated by L. Dora Schmitz. 2 vols. 3*s*. 6*d*. each.

SHAKESPEARE (William). A Literary Biography by Karl Elze, Ph.D., LL.D. Translated by L. Dora Schmitz. 5*s*.

SHARPE (S.) The History of Egypt, from the Earliest Times till the Conquest by the Arabs, A.D. 640. By Samuel Sharpe. 2 Maps and upwards of 400 Illustrative Woodcuts. 2 vols. 5*s*. each.

SHERIDAN'S Dramatic Works, Complete. With Life by G. G. S. 3*s*. 6*d*.

SISMONDI'S History of the Literature of the South of Europe. Translated by Thomas Roscoe. 2 vols. 3*s*. 6*d*. each.

SMITH'S Synonyms and Antonyms, or Kindred Words and their **Opposites.** Revised Edition. 5*s*.

—— **Synonyms Discriminated.** A Dictionary of Synonymous Words in the English Language, showing the Accurate signification of words of similar meaning. Edited by the Rev. H. Percy Smith, M.A. 6*s*.

SMITH'S (Adam) The Wealth of Nations. Edited by E. Belfort Bax. 2 vols. 3*s*. 6*d*. each.

—— **Theory of Moral Sentiments.** With a Memoir of the Author by Dugald Stewart. 3*s*. 6*d*.

SMYTH'S (Professor) Lectures on Modern History. 2 vols. 3*s*. 6*d*. each.

SMYTH'S (Professor) Lectures on the French Revolution. 2 vols. 3*s*. 6*d*. each.

SMITH'S (Pye) Geology and Scripture. 2nd Edition. 5*s*.

SMOLLETT'S Adventures of Roderick Random. With short Memoir and Bibliography, and *Cruikshank's* Illustrations. 3*s*. 6*d*.

SMOLLETT'S Adventures of Peregrine Pickle. With Bibliography and Cruikshank's Illustrations. 2 vols. 3*s*. 6*d*. each.

—— **The Expedition of Humphry Clinker.** With Bibliography and Cruikshank's Illustrations. 3*s*. 6*d*.

SOCRATES (surnamed 'Scholasticus'). The Ecclesiastical History of (A.D. 305–445). Translated from the Greek. 5*s*.

SOPHOCLES, The Tragedies of. A New Prose Translation, with Memoir, Notes, &c., by E. P. Coleridge, M.A. 5*s*.

SOUTHEY'S Life of Nelson. With Portraits, Plans, and upwards of 50 Engravings on Steel and Wood. 5*s*.

—— **Life of Wesley,** and the Rise and Progress of Methodism. 5*s*.

—— **Robert Southey.** The Story of his Life written in his Letters. Edited by John Dennis. 3*s*. 6*d*.

SOZOMEN'S Ecclesiastical History. Translated from the Greek. Together with the ECCLESIASTICAL HISTORY OF PHILOSTORGIUS, as epitomised by Photius. Translated by Rev. E. Walford, M.A. 5*s*.

SPINOZA'S Chief Works. Translated, with Introduction, by R. H. M. Elwes. 2 vols. 5*s*. each.

STANLEY'S Classified Synopsis of the Principal Painters of the Dutch and Flemish Schools. By George Stanley. 5*s*.

STARLING'S (Miss) Noble Deeds of Women. With 14 Steel Engravings. 5*s*.

STAUNTON'S Chess-Player's Handbook. 5*s*.

—— **Chess Praxis.** A Supplement to the Chess-player's Handbook. 5*s*.

STAUNTON'S Chess-player's Companion. Comprising a Treatise on Odds, Collection of Match Games, and a Selection of Original Problems. 5*s.*

—— **Chess Tournament of 1851.** With Introduction and Notes. 5*s.*

STOCKHARDT'S Experimental Chemistry. Edited by C. W. Heaton, F.C.S. 5*s.*

STOWE (Mrs. H. B.) Uncle Tom's Cabin. Illustrated. 3*s.* 6*d.*

STRABO'S Geography. Translated by W. Falconer, M.A., and H. C. Hamilton. 3 vols. 5*s.* each.

STRICKLAND'S (Agnes) Lives of the Queens of England, from the Norman Conquest. Revised Edition. With 6 Portraits. 6 vols. 5*s.* each.

—— **Life of Mary Queen of Scots.** 2 vols. 5*s.* each.

—— **Lives of the Tudor and Stuart Princesses.** With Portraits. 5*s.*

STUART and REVETT'S Antiquities of Athens, and other Monuments of Greece. With 71 Plates engraved on Steel, and numerous Woodcut Capitals. 5*s.*

SUETONIUS' Lives of the Twelve Cæsars and Lives of the Grammarians. Thomson's translation, revised by T. Forester. 5*s.*

SWIFT'S Prose Works. Edited by Temple Scott. With a Biographical Introduction by the Right Hon. W. E. H. Lecky, M.P. With Portraits and Facsimiles. 12 vols. 3*s.* 6*d.* each.

[*Vols. I.-X. ready.*

I.—A Tale of a Tub, The Battle of the Books, and other early works. Edited by Temple Scott. With a Biographical Introduction by W. E. H. Lecky.

SWIFT'S PROSE WORKS *continued.*

II.—The Journal to Stella. Edited by Frederick Ryland, M.A. With 2 Portraits and Facsimile.

III. & IV.—Writings on Religion and the Church.

V.—Historical and Political Tracts (English).

VI.—The Drapier's Letters. With facsimiles of Wood's Coinage, &c.

VII.—Historical and Political Tracts (Irish).

VIII.—Gulliver's Travels. Edited by G. R. Dennis. With Portrait and Maps.

IX.—Contributions to Periodicals.

X.—Historical Writings.

XI.—Literary Essays.

[*In preparation.*

XII.—Index and Bibliography.

[*In preparation.*

TACITUS. The Works of. Literally translated. 2 vols. 5*s.* each.

TALES OF THE GENII. Translated from the Persian by Sir Charles Morell. Numerous Woodcuts and 12 Steel Engravings. 5*s.*

TASSO'S Jerusalem Delivered. Translated into English Spenserian Verse by J. H. Wiffen. With 8 Engravings on Steel and 24 Woodcuts by Thurston. 5*s.*

TAYLOR'S (Bishop Jeremy) Holy Living and Dying. 3*s.* 6*d.*

TEN BRINK.—*See* BRINK.

TERENCE and PHÆDRUS. Literally translated by H. T. Riley, M.A. To which is added, Smart's Metrical Version of Phædrus. 5*s.*

THEOCRITUS, BION, MOSCHUS, and TYRTÆUS. Literally translated by the Rev. J. Banks, M.A. To which are appended the Metrical Versions of Chapman. 5*s.*

THEODORET and EVAGRIUS. Histories of the Church from A.D. 332 to A.D. 427; and from A.D. 431 to A.D. 544. Translated. 5*s.*

THIERRY'S History of the Conquest of England by the Normans. Translated by William Hazlitt. 2 vols. 3*s.* 6*d.* each.

THUCYDIDES. The Peloponnesian War. Literally translated by the Rev. H. Dale. 2 vols. 3*s.* 6*d.* each.

—— **An Analysis and Summary of.** By J. T. Wheeler. 5*s.*

THUDICHUM (J. L. W.) A Treatise on Wines. Illustrated. 5*s.*

URE'S (Dr. A.) Cotton Manufacture of Great Britain. Edited by P. L. Simmonds. 2 vols. 5*s.* each.

—— **Philosophy of Manufactures.** Edited by P. L. Simmonds. 7*s.* 6*d.*

VASARI'S Lives of the most Eminent Painters, Sculptors, and Architects. Translated by Mrs. J. Foster, with a Commentary by J. P. Richter, Ph.D. 6 vols. 3*s.* 6*d.* each.

VIRGIL. A Literal Prose Translation by A. Hamilton Bryce, LL.D. With Portrait. 3*s.* 6*d.*

VOLTAIRE'S Tales. Translated by R. B. Boswell. Containing Bebouc, Memnon, Candide, L'Ingénu, and other Tales. 3*s.* 6*d.*

WALTON'S Complete Angler. Edited by Edward Jesse. With Portrait and 203 Engravings on Wood and 26 Engravings on Steel. 5*s.*

—— **Lives of Donne, Hooker, &c.** New Edition revised by A. H. Bullen, with a Memoir of Izaak Walton by Wm. Dowling. With numerous Illustrations. 5*s.*

WELLINGTON, Life of. By 'An Old Soldier.' From the materials of Maxwell. With Index and 18 Steel Engravings. 5*s.*

WELLINGTON, Victories of. *See* MAXWELL.

WERNER'S Templars in Cyprus. Translated by E. A. M. Lewis. 3*s.* 6*d.*

WESTROPP (H. M.) A Handbook of Archæology, Egyptian, Greek, Etruscan, Roman. Illustrated. 5*s.*

WHITE'S Natural History of Selborne. With Notes by Sir William Jardine. Edited by Edward Jesse. With 40 Portraits and coloured Plates. 5*s.*

WHEATLEY'S A Rational Illustration of the Book of Common Prayer. 3*s.* 6*d.*

WHEELER'S Noted Names of Fiction, Dictionary of. 5*s.*

WIESELER'S Chronological Synopsis of the Four Gospels. Translated by the Rev. Canon Venables. 3*s.* 6*d.*

WILLIAM of MALMESBURY'S Chronicle of the Kings of England. Translated by the Rev. J. Sharpe. Edited by J. A. Giles, D.C.L. 5*s.*

XENOPHON'S Works. Translated by the Rev. J. S. Watson, M.A., and the Rev. H. Dale. In 3 vols. 5*s.* each.

YOUNG (Arthur). Travels in France during the years 1787, 1788, and 1789. Edited by M. Betham Edwards. 3*s.* 6*d.*

—— **Tour in Ireland,** with General Observations on the state of the country during the years 1776–79. Edited by A. W. Hutton. With Complete Bibliography by J. P. Anderson, and Map. 2 vols. 3*s.* 6*d.* each.

YULE-TIDE STORIES. A Collection of Scandinavian and North-German Popular Tales and Traditions. Edited by B. Thorpe. 5*s.*

THE YORK LIBRARY

A NEW SERIES OF REPRINTS ON THIN PAPER.

The volumes are printed in a handy size (6½ × 4¼ in.), on thin but opaque paper, and are simply and attractively bound.

Price, in cloth, 2s. net ; in leather, 3s. net.

'The York Library is noticeable by reason of the wisdom and intelligence displayed in the choice of unhackneyed classics. . . . A most attractive series of reprints. . . . The size and style of the volumes are exactly what they should be.'—*Bookman.*

'These books should find their way to every home that owns any cultivation.'—*Notes and Queries.*

The following volumes are now ready:

CHARLOTTE BRONTË'S JANE EYRE.

BURNEY'S EVELINA. Edited, with an Introduction and Notes, by Annie Raine Ellis.

BURNEY'S CECILIA. Edited by Annie Raine Ellis. 2 vols.

BURTON'S ANATOMY OF MELANCHOLY. Edited by the Rev. A. R. Shilleto, M.A., with Introduction by A. H. Bullen. 3 vols.

BURTON'S (SIR RICHARD) PILGRIMAGE TO AL-MADINAH AND MECCAH. With Introduction by Stanley Lane-Poole. 2 vols.

CERVANTES' DON QUIXOTE. Motteux's Translation, revised. With Lockhart's Life and Notes. 2 vols.

CLASSIC TALES: Johnson's Rasselas, Goldsmith's Vicar of Wakefield, Sterne's Sentimental Journey, Walpole's Castle of Otranto. With Introduction by C. S. Fearenside, M.A.

COLERIDGE'S AIDS TO REFLECTION, and the Confessions of an Inquiring Spirit.

COLERIDGE'S FRIEND. A series of Essays on Morals, Politics, and Religion.

COLERIDGE'S TABLE TALK AND OMNIANA. Arranged and Edited by T. Ashe, B.A.

DRAPER'S HISTORY OF THE INTELLECTUAL DEVELOPMENT OF EUROPE. 2 vols.

GEORGE ELIOT'S ADAM BEDE.

EMERSON'S WORKS. A new edition in 5 volumes, with the Text edited and collated by George Sampson.

FIELDING'S TOM JONES. 2 vols.

GASKELL'S SYLVIA'S LOVERS.

THE YORK LIBRARY—*continued.*

GESTA ROMANORUM, or Entertaining Moral Stories invented by the Monks. Translated from the Latin by the Rev. CHARLES SWAN. Revised edition, by WYNNARD HOOPER, M.A.

GOETHE'S FAUST. Translated by ANNA SWANWICK, LL.D. Revised edition, with an Introduction and Bibliography by KARL BREUL, Litt.D., Ph.D.

HAWTHORNE'S TRANSFORMATION (THE MARBLE FAUN).

IRVING'S SKETCH BOOK.

JAMESON'S SHAKESPEARE'S HEROINES. Characteristics of Women: Moral, Poetical, and Historical.

LAMB'S ESSAYS. Including the Essays of Elia, Last Essays of Elia, and Eliana.

MARCUS AURELIUS ANTONINUS, THE THOUGHTS OF. Translated by GEORGE LONG, M.A. With an Essay on Marcus Aurelius by MATTHEW ARNOLD.

MARRYAT'S MR. MIDSHIPMAN EASY. With 8 Illustrations by E. T. WHEELER.

MARRYAT'S PETER SIMPLE. With 8 Illustrations by F. A. FRASER.

MONTAIGNE'S ESSAYS. Cotton's translation. Revised by W. C. HAZLITT. 3 vols.

MORE'S UTOPIA. With the Life of Sir Thomas More, by William Roper, and his Letters to Margaret Roper and others. Edited, with Introduction and Notes, by GEORGE SAMPSON. [*In the Press.*

MOTLEY'S RISE OF THE DUTCH REPUBLIC. With a Biographical Introduction by MONCURE D. CONWAY. 3 vols.

PASCAL'S THOUGHTS. Translated from the Text of M. AUGUSTE MOLINIER by C. KEGAN PAUL. Third edition.

PLUTARCH'S LIVES. Translated, with Notes and a Life by AUBREY STEWART, M.A., and GEORGE LONG, M.A. 4 vols.

SWIFT'S GULLIVER'S TRAVELS. Edited, with Introduction and Notes, by G. R. DENNIS, with facsimiles of the original illustrations.

SWIFT'S JOURNAL TO STELLA. Edited, with Introduction and Notes, by F. RYLAND, M.A.

TROLLOPE'S THE WARDEN. With an Introduction by FREDERIC HARRISON.

TROLLOPE'S BARCHESTER TOWERS.

TROLLOPE'S DR. THORNE.

TROLLOPE'S FRAMLEY PARSONAGE.

TROLLOPE'S SMALL HOUSE AT ALLINGTON. 2 vols.

TROLLOPE'S LAST CHRONICLE OF BARSET. 2 vols.

ARTHUR YOUNG'S TRAVELS IN FRANCE, during the *years 1787, 1788,* and *1789.* Edited with Introduction and Notes, by M. *BETHAM EDWARDS.*

Other Volumes are in Preparation.

BELL'S HANDBOOKS
OF
THE GREAT MASTERS
IN PAINTING AND SCULPTURE.

Edited by G. C. WILLIAMSON, Litt.D.

Post 8vo. With 40 Illustrations and Photogravure Frontispiece. 5*s.* net each.

The following Volumes have been issued:

BOTTICELLI. By A. Streeter. 2nd Edition.
BRUNELLESCHI. By Leader Scott.
CORREGGIO. By Selwyn Brinton, M.A. 2nd Edition.
CARLO CRIVELLI. By G. McNeil Rushforth, M.A.
DELLA ROBBIA. By the Marchesa Burlamacchi. 2nd Edition.
ANDREA DEL SARTO. By H. Guinness. 2nd Edition.
DONATELLO. By Hope Rea. 2nd Edition.
GERARD DOU. By Dr. W. Martin. Translated by Clara Bell.
GAUDENZIO FERRARI. By Ethel Halsey.
FRANCIA. By George C. Williamson, Litt.D.
GIORGIONE. By Herbebt Cook, M.A.
GIOTTO. By F. Mason Perkins.
FRANS HALS. By Gerald S. Davies, M.A.
BERNARDINO LUINI. By George C. Williamson, Litt.D. 3rd Edition.
LEONARDO DA VINCI. By Edward McCurdy, M.A.
MANTEGNA. By Maud Cruttwell.
MEMLINC. By W. H. James Weale.
MICHEL ANGELO. By Lord Ronald Sutherland Gower, M.A., F.S.A.
PERUGINO. By G C. Williamson, Litt.D. 2nd Edition.
PIERO DELLA FRANCESCA. By W. G. Waters, M.A.
PINTORICCHIO. By Evelyn March Phillipps.
RAPHAEL. By H. Strachey. 2nd Edition.
REMBRANDT. By Malcolm Bell. 2nd Edition.
RUBENS. By Hope Rea.
LUCA SIGNORELLI. By Maud Cruttwell. 2nd Edition.
SODOMA. By the Contessa Lorenzo Priuli-Bon.
TINTORETTO. By J. B. Stoughton Holborn, M.A.
VAN DYCK. By Lionel Cust, M.V.O., F.S.A.
VELASQUEZ. By R. A. M. Stevenson. 3rd Edition.
WATTEAU. By Edgcumbe Staley, B.A.
WILKIE. By Lord Ronald Sutherland Gower, M.A., F.S.A.

Others to follow.

THE

CHISWICK SHAKESPEARE.

Illustrated by BYAM SHAW

WITH INTRODUCTIONS AND GLOSSARIES BY JOHN DENNIS.

Printed at the Chiswick Press, pott 8vo., price 1*s.* 6*d.* net per volume; also a cheaper edition, 1*s.* net per volume; or 2*s.* net in limp leather; also a few copies, on Japanese vellum, to be sold only in sets, price 5*s.* net per volume.

Now Complete in 39 Volumes.

ALL'S WELL THAT ENDS WELL.
ANTONY AND CLEOPATRA.
AS YOU LIKE IT.
COMEDY OF ERRORS.
CORIOLANUS.
CYMBELINE.
HAMLET.
JULIUS CÆSAR.
KING HENRY IV. Part I.
KING HENRY IV. Part II.
KING HENRY V.
KING HENRY VI. Part I.
KING HENRY VI. Part II.
KING HENRY VI. Part III.
KING HENRY VIII.
KING JOHN.
KING LEAR.
KING RICHARD II.
KING RICHARD III.
LOVE'S LABOUR'S LOST.
MACBETH.
MEASURE FOR MEASURE.
MERCHANT OF VENICE.
MERRY WIVES OF WINDSOR.
MIDSUMMER-NIGHT'S DREAM.
MUCH ADO ABOUT NOTHING.
OTHELLO.
PERICLES.
ROMEO AND JULIET.
THE TAMING OF THE SHREW.
THE TEMPEST.
TIMON OF ATHENS.
TITUS ANDRONICUS.
TROILUS AND CRESSIDA.
TWELFTH NIGHT.
TWO GENTLEMEN OF VERONA.
WINTER'S TALE.
POEMS.
SONNETS.

'A fascinating little edition.'—*Notes and Queries.*

'A cheap, very comely, and altogether desirable edition.'—*Westminster Gazette.*

But a few years ago such volumes would have been deemed worthy to be considered *éditions de luxe*. To-day, the low price at which they are offered to the public alone prevents them being so regarded.'—*Studio.*

'Handy in shape and size, wonderfully cheap, beautifully printed from the Cambridge text, and illustrated quaintly yet admirably by Mr. Byam Shaw, we have nothing but praise for it. No one who wants a good and convenient Shakespeare—without excursuses, discursuses, or even too many notes—can do better, in our opinion, than subscribe to this issue: which is saying a good deal in these days of cheap reprints.'—*Vanity Fair.*

'What we like about these elegant booklets is the attention that has been paid to the paper, as well as to the print and decoration; such stout laid paper will last for ages. On this account alone, the 'Chiswick' *should easily be first* among pocket Shakespeares.'—*Pall Mall Gazette.*

*** *The Chiswick Shakespeare may also be had bound in* 12 *volumes, full gilt back, price* 36*s. net.*

New Editions, fcap. 8vo. 2*s.* 6*d.* each net.

THE ALDINE EDITION

OF THE

BRITISH POETS.

'This excellent edition of the English classics, with their complete texts and scholarly introductions, are something very different from the cheap volumes of extracts which are just now so much too common.'—*St. James's Gazette.*

'An excellent series. Small, handy, and complete.'—*Saturday Review.*

Akenside. Edited by Rev. A. Dyce.

Beattie. Edited by Rev. A. Dyce.

Blake. Edited by W. M. Rossetti.

Burns. Edited by G. A. Aitken. 3 vols.

Butler. Edited by R. B. Johnson. 2 vols.

Campbell. Edited by His Son-in-law, the Rev. A. W. Hill. With Memoir by W. Allingham.

Chatterton. Edited by the Rev. W. W. Skeat, M.A. 2 vols.

Chaucer. Edited by Dr. R. Morris, with Memoir by Sir H. Nicolas. 6 vols.

Churchill. Edited by Jas. Hannay. 2 vols.

Coleridge. Edited by T. Ashe, B.A. 2 vols.

Collins. Edited by W. Moy Thomas.

Cowper. Edited by John Bruce, F.S.A. 3 vols.

Dryden. Edited by the Rev. R. Hooper, M.A. 5 vols.

Goldsmith. Revised Edition by Austin Dobson. With Portrait.

Gray. Edited by J. Bradshaw, LL.D.

Herbert. Edited by the Rev. A. B. Grosart.

Herrick. Edited by George Saintsbury. 2 vols.

Keats. Edited by the late Lord Houghton.

Kirke White. Edited, with a Memoir, by Sir H. Nicolas.

Milton. Edited by Dr. Bradshaw. 2 vols.

Parnell. Edited by G. A. Aitken.

Pope. Edited by G. R. Dennis. With Memoir by John Dennis. 3 vols.

Prior. Edited by R. B. Johnson. 2 vols.

Raleigh and Wotton. With Selections from the Writings of other COURTLY POETS from 1540 to 1650. Edited by Ven. Archdeacon Hannah, D.C.L.

Rogers. Edited by Edward Bell, M.A.

Scott. Edited by John Dennis. 5 vols.

Shakespeare's Poems. Edited by Rev. A. Dyce.

Shelley. Edited by H. Buxton Forman. 5 vols.

Spenser. Edited by J. Payne Collier. 5 vols.

Surrey. Edited by J. Yeowell.

Swift. Edited by the Rev. J. Mitford. 3 vols.

Thomson. Edited by the Rev. D. C. Tovey. 2 vols.

Vaughan. Sacred Poems and Pious Ejaculations. Edited by the Rev. H. Lyte.

Wordsworth. Edited by Prof. Dowden. 7 vols.

Wyatt. Edited by J. Yeowell.

Young. 2 vols. Edited by the Rev. J. Mitford.

THE ALL-ENGLAND SERIES.

HANDBOOKS OF ATHLETIC GAMES.

The only Series issued at a moderate price, by Writers who are in the first rank in their respective departments.

'The best instruction on games and sports by the best authorities, at the lowest prices.'—*Oxford Magazine.*

Small 8vo. cloth, Illustrated. Price 1s. each.

Cricket. By Fred C. Holland.

Cricket. By the Hon. and Rev. E. Lyttelton.

Croquet. By Lieut.-Col. the Hon. H. C. Needham.

Lawn Tennis. By H. W. W. Wilberforce. With a Chapter for Ladies, by Mrs. Hillyard.

Squash Tennis. By Eustace H. Miles. Double vol. 2s.

Tennis and Rackets and Fives. By Julian Marshall, Major J. Spens, and Rev. J. A. Arnan Tait.

Golf. By H. S. C. Everard. Double vol. 2s.

Rowing and Sculling. By Guy Rixon.

Rowing and Sculling. By W. B. Woodgate.

Sailing. By E. F. Knight, dbl. vol. 2s.

Swimming. By Martin and J. Racster Cobbett.

Camping out. By A. A. Macdonell. Double vol. 2s.

Canoeing. By Dr. J. D. Hayward. Double vol. 2s.

Mountaineering. By Dr. Claude Wilson. Double vol. 2s.

Athletics. By H. H. Griffin.

Riding. By W. A. Kerr, V.C. Double vol. 2s.

Ladies' Riding. By W. A. Kerr, V.C.

Boxing. By R. G. Allanson-Winn. With Prefatory Note by Bat Mullins.

Fencing. By H. A. Colmore Dunn.

Cycling. By H. H. Griffin, L.A.C., N.C.U., C.T.C. With a Chapter for Ladies, by Miss Agnes Wood. Double vol. 2s.

Wrestling. By Walter Armstrong. New Edition.

Broadsword and Singlestick. By R. G. Allanson-Winn and C. Phillipps-Wolley.

Gymnastics. By A. F. Jenkin. Double vol. 2s.

Gymnastic Competition and Display Exercises. Compiled by F. Graf.

Indian Clubs. By G. T. B. Cobbett and A. F. Jenkin.

Dumb-bells. By F. Graf.

Football — Rugby Game. By Harry Vassall.

Football—Association Game. By C. W. Alcock. Revised Edition.

Hockey. By F. S. Creswell. New Edition.

Skating. By Douglas Adams. With a Chapter for Ladies, by Miss L. Cheetham, and a Chapter on Speed Skating, by a Fen Skater. Dbl. vol. 2s.

Baseball. By Newton Crane.

Rounders, Fieldball, Bowls, Quoits, Curling, Skittles, &c. By J. M. Walker and C. C. Mott.

Dancing. By Edward Scott. Double vol. 2s.

THE CLUB SERIES OF CARD AND TABLE GAMES.

'No well-regulated club or country house should be without this useful series of books.' *Globe.*

Small 8vo. cloth, Illustrated. Price 1s. each.

Bridge. By 'Templar.'

Whist. By Dr. Wm. Pole, F.R.S.

Solo Whist. By Robert F. Green.

Billiards. By Major-Gen. A. W. Drayson, F.R.A.S. With a Preface by W. J. Peall.

Hints on Billiards. By J. P. Buchanan. Double vol. 2s.

Chess. By Robert F. Green.

The Two-Move Chess Problem. By B. G. Laws.

Chess Openings. By I. Gunsberg.

Draughts and Backgammon. *By 'Berkeley.'*

***Reversi* and Go Bang.** *By 'Berkeley.'*

Dominoes and Solitaire. By 'Berkeley.'

Bézique and Cribbage. By 'Berkeley.'

Écarté and Euchre. By 'Berkeley.'

Piquet and Rubicon Piquet. By 'Berkeley.'

Skat. By Louis Diehl.
*** A Skat Scoring-book. 1s.

Round Games, including Poker, Napoleon, Loo, Vingt-et-un, &c. By Baxter-Wray.

Parlour and Playground Games. By Mrs. Laurence Gomme.

BELL'S CATHEDRAL SERIES.

Profusely Illustrated, cloth, crown 8vo. 1s. 6d. net each.

ENGLISH CATHEDRALS. An Itinerary and Description. Compiled by James G. Gilchrist, A.M., M.D. Revised and edited with an Introduction on Cathedral Architecture by the Rev. T. Perkins, M.A., F.R.A.S.

BANGOR. By P. B. Ironside Bax.
BRISTOL. By H. J. L. J. Massé, M.A.
CANTERBURY. By Hartley Withers. 5th Edition.
CARLISLE. By C. King Eley.
CHESTER. By Charles Hiatt. 3rd Edition.
CHICHESTER. By H. C. Corlette, A.R.I.B.A. 2nd Edition.
DURHAM. By J. E. Bygate, A.R.C.A. 3rd Edition.
ELY. By Rev. W. D. Sweeting, M.A. 2nd Edition.
EXETER. By Percy Addleshaw, B.A. 2nd Edition, revised.
GLOUCESTER. By H. J. L. J. Massé, M.A. 3rd Edition.
HEREFORD. By A. Hugh Fisher, A.R.E. 2nd Edition, revised.
LICHFIELD. By A. B. Clifton. 2nd Edition.
LINCOLN. By A. F. Kendrick, B.A. 3rd Edition.
MANCHESTER. By Rev. T. Perkins, M.A.
NORWICH. By C. H. B. Quennell. 2nd Edition.
OXFORD. By Rev. Percy Dearmer, M.A. 2nd Edition, revised.
PETERBOROUGH. By Rev. W. D. Sweeting. 2nd Edition, revised.
RIPON. By Cecil Hallett, B.A.
ROCHESTER. By G. H. Palmer, B.A. 2nd Edition, revised.
ST. ALBANS. By Rev. T. Perkins, M.A.
ST. ASAPH. By P. B. Ironside Bax.
ST. DAVID'S. By Philip Robson, A.R.I.B.A.
ST. PATRICK'S, DUBLIN. By Rev. J. H. Bernard, M.A., D.D. 2nd Edition.
ST. PAUL'S. By Rev. Arthur Dimock, M.A. 3rd Edition, revised.
ST. SAVIOUR'S, SOUTHWARK. By George Worley.
SALISBURY. By Gleeson White. 3rd Edition, revised.
SOUTHWELL. By Rev. Arthur Dimock, M.A. 2nd Edition, revised.
WELLS. By Rev. Percy Dearmer, M.A. 3rd Edition.
WINCHESTER. By P. W. Sergeant. 3rd Edition.
WORCESTER. By E. F. Strange. 2nd Edition.
YORK. By A. Clutton-Brock, M.A. 3rd Edition.

Uniform with above Series. Now ready. 1s. 6d. net each.

ST. MARTIN'S CHURCH, CANTERBURY. By the Rev. Canon Routledge, M.A., F.S.A.
BEVERLEY MINSTER. By Charles Hiatt.
WIMBORNE MINSTER and CHRISTCHURCH PRIORY. By the Rev. T. Perkins, M.A.
TEWKESBURY ABBEY AND DEERHURST PRIORY. By H. J. L. J. Massé, M.A.
BATH ABBEY, MALMESBURY ABBEY, and BRADFORD-ON-AVON CHURCH. By Rev. T. Perkins, M.A.
WESTMINSTER ABBEY. By Charles Hiatt.
STRATFORD-ON-AVON CHURCH. By Harold Baker.

BELL'S HANDBOOKS TO CONTINENTAL CHURCHES.

Profusely Illustrated. Crown 8vo, cloth, 2s. 6d. net each.

AMIENS By the Rev. T. Perkins, M.A.
BAYEUX. By the Rev. R. S. Mylne.
CHARTRES: The Cathedral and Other Churches. By H. J. L. J. Massé, M.A.
MONT ST. MICHEL. By H. J. L. J. Massé, M.A.
PARIS (NOTRE-DAME). By Charles Hiatt.
ROUEN: The Cathedral and Other Churches. By the Rev. T. Perkins, M.A.

The Best Practical Working Dictionary of the English Language.

WEBSTER'S INTERNATIONAL DICTIONARY.

2348 PAGES. 5000 ILLUSTRATIONS.

NEW EDITION, REVISED THROUGHOUT WITH A NEW SUPPLEMENT OF 25,000 ADDITIONAL WORDS AND PHRASES. 13

The Appendices comprise a Pronouncing Gazetteer of the World, Vocabularies of Scripture, Greek, Latin, and English Proper Names, a Dictionary of the Noted Names of Fiction, a Brief History of the English Language, a Dictionary of Foreign Quotations, Words, Phrases, Proverbs, &c., a Biographical Dictionary with 10,000 names, &c., &c.

Dr. MURRAY, *Editor of the 'Oxford English Dictionary,'* says:—'In this its latest form, and with its large Supplement and numerous appendices, it is a wonderful volume, which well maintains its ground against all rivals on its own lines. The 'definitions,' or more properly, 'explanations of meaning' in 'Webster' have always struck me as particularly terse and well-put; and it is hard to see how anything better could be done within the limits.'

Professor JOSEPH WRIGHT, M.A., Ph.D., D.C.L., LL.D., *Editor of the 'English Dialect Dictionary,'* says:—'The new edition of "Webster's International Dictionary" is undoubtedly the most useful and reliable work of its kind in any country. No one who has not examined the work carefully would believe that such a vast amount of lexicographical information could possibly be found within so small a compass.'

Professor A. H. SAYCE, LL.D., D.D., says:—'It is indeed a marvellous work; it is difficult to conceive of a Dictionary more exhaustive and complete. Everything is in it—not only what we might expect to find in such a work, but also what few of us would ever have thought of looking for.'

Rev. JOSEPH WOOD, D.D., *Head Master of Harrow,* says:—'I have always thought very highly of its merits. Indeed, I consider it to be far the most accurate English Dictionary in existence, and much more reliable than the "Century." For daily and hourly reference, "Webster" seems to me unrivalled.'

Prospectuses, with Prices and Specimen Pages, on Application.

LONDON: GEORGE BELL & SONS, YORK HOUSE,
PORTUGAL STREET, W.C.

50,000. S. & S. 11.06.

Stanford University Libraries
3 6105 016 668 472

STANFORD UNIVERSITY LIBRARIES
STANFORD AUXILIARY LIBRARY
STANFORD, CALIFORNIA 94305-6004
(415) 723-9201
All books may be recalled after 7 days

DATE DUE

F/S JUN 3 0 1998

JAN 2 2 2001